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Review of the *Thinodromus signatus* species group (Insecta: Coleoptera: Staphylinidae: Oxytelinae)

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Abstract

The South American *Thinodromus signatus* species group is distributed primarily in the Andes of Chile and Argentina, there ubiquitous and almost hegemonistic members of the *Carpelimus* group of genera. The species live on stream- and riverbanks, often in moss or among gravel. Formerly most species were included in the genus-group taxon *Paracarpalimus* Scheerpeltz, 1937, and one was described in its own subgenus *Stenoderophloeus* Scheerpeltz, 1972, syn.n., both are here treated under *Thinodromus* Kraatz, 1857. Identities of all the so far named species are clarified, 25 valid species are recognized, eight of these are described here as new: *Thinodromus franzi* sp.n. (Chile: Aysén), *Th. janinae* sp.n. (Chile: Bíobío), *Th. kadari* sp.n. (Chile: Chiloe), *Th. newtonorum* sp.n. (Chile: Osorno), *Th. saizi* sp.n. (Chile: Malleco), *Th. struyvei* sp.n. (Chile: Curicó), *Th. tegens* sp.n. (Chile: Malleco) and *Th. toroi* sp.n. (Argentina: Neuquén). Although not recognized as a member of the species group, *Th. guttula* (Bernhauer, 1922) is also treated here. The following new synonymies are proposed: *Thinodromus andicola* (Fairmaire & Germain, 1861) = *Tr. cameroni* Bernhauer, 1926, syn.n., *Tr. acuticollis* Bernhauer, 1927, syn.n., = *Tr. acuticollis* var. *walkeri* Bernhauer, 1933, syn.n., = *Trogophloeus sulcifrons* Coiffait & Sáiz, 1968, syn.n., = *Trogophloeus atacamensis* Coiffait & Sáiz, 1968, syn.n., = *T. quadripennis* Scheerpeltz, 1972, syn.n., = *Tr. bolsonensis* Scheerpeltz, 1972, syn.n., = *Tr. brunnipennis* Scheerpeltz, 1972, syn.n.; *Th. germaini* (Coiffait & Sáiz, 1968) = *Tr. nigronitidus* Scheerpeltz, 1972, syn.n.; *Th. guttula* (Bernhauer, 1922) = *Tr. binotatus* Bernhauer, 1922, syn.n., = *Tr. catamarcanus* Bernhauer, 1925, syn.n.; *Th. impressipennis* (Fairmaire & Germain, 1861) = *Tr. iniquipennis* Scheerpeltz, 1972, syn.n.; *Th. nitidifrons* (Fauvel, 1867) = *Tr. ocultus* Coiffait & Sáiz, 1968, syn.n.; *Th. schwabei* (Bernhauer, 1939) = *Tr. guttifer* Scheerpeltz, 1972, syn.n.; *Th. signatus* (Erichson, 1834) = *Tr. nitidiventris* Fairmaire & Germain, 1861, syn.n. Lectotypes are designated for *Homalotrichus fuscus* Solier, 1849, *Trogophloeus andicola* Fairmaire & Germain, 1861, *Tr. angulicollis* Fauvel, 1867, *Tr. araucanus* Fauvel, 1867, *Tr. binotatus* Bernhauer, 1922, *Tr. championi* Bernhauer, 1912, *Tr. grandipennis* Bernhauer, 1934, *Tr. guttula* Bernhauer, 1922, *Tr. impressipennis* Fairmaire & Germain, 1861, *Tr. mersus* Fairmaire & Germain, 1861, *Tr. nitidifrons* Fauvel, 1867, *Tr. nitidiventris* Fairmaire & Germain, 1861, *Tr. schwabei* Bernhauer, 1939, *Tr. signatus* Erichson, 1834, *Tr. acuticollis* var. *walkeri* Bernhauer, 1933 and neotypes for *Trogophloeus asperatus* Coiffait & Sáiz, 1968 (Chile: Araucanía), *Tr. fulgidus* Coiffait & Sáiz, 1968 (Chile: Santiago), *Tr. germaini* Coiffait & Sáiz, 1968 (Chile: Cachapoal), *Tr. ocultus* Coiffait & Sáiz, 1968 (Chile: Valparaiso), *Tr. sulcifrons* Coiffait & Sáiz, 1968 (Chile: Magallanes) and *Homalotrichus obscurus* Solier, 1849 (Chile: Santiago). Valid species are illustrated by line drawings of the male terminalia and genitalia plus colour habitus photographs. A key is provided for all the treated taxa.

Key words: Coleoptera, Staphylinidae, Oxytelinae, *Thinodromus*, *Paracarpalimus*, new species, new synonyms, lectotypes, neotypes, key, Andes, Neotropical region, Southern Temperate zone.

Zusammenfassung

Die *Thinodromus signatus*-Artengruppe ist vorwiegend in den chilenischen und argentinischen Anden verbreitet und stellt dort die vorherrschenden Vertreter der *Carpelimus*-Gattungsgruppe dar. Die Arten leben an Ufern von Fließgewässern, oft in Moos und Schotter. Früher wurden die meisten Arten der Gattung

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Paracarpalimus SCHEERPELTZ, 1937 zugeordnet, eine sogar in einer eigenen Untergattung *Stenoderophloeus* SCHEERPELTZ, 1972. Beide werden hier als Synonyme zu *Thinodromus* KRAATZ, 1857 behandelt. Die Identitäten aller bekannten Arten sind geklärt, 25 gültige Arten sind bekannt, acht davon werden neu beschrieben: *Thinodromus franzi* sp.n. (Chile: Aysén), *Th. janinae* sp.n. (Chile: Bíobío), *Th. kadari* sp.n. (Chile: Chiloe), *Th. newtonorum* sp.n. (Chile: Osorno), *Th. saizi* sp.n. (Chile: Malleco), *Th. struyvei* sp.n. (Chile: Curicó), *Th. tegens* sp.n. (Chile: Malleco) and *Th. toroi* sp.n. (Argentina: Neuquén). Obwohl nicht als zur Artgruppe gehörig aufgefasst, wird *Th. guttula* (BERNHAUER, 1922) ebenfalls hier behandelt. Folgende neue Synonymien werden vorgeschlagen: *Thinodromus andicola* (FAIRMAIRE & GERMAIN, 1861) = *Tr. cameroni* BERNHAUER, 1926, syn.n., *Tr. acuticollis* BERNHAUER, 1927, syn.n., = *Tr. acuticollis* var. *walkeri* BERNHAUER, 1933, syn.n., = *Trogophloeus sulcifrons* COIFFAIT & SÁIZ, 1968, syn.n., = *Trogophloeus atacamensis* COIFFAIT & SÁIZ, 1968, syn.n., = *T. quadripennis* SCHEERPELTZ, 1972, syn.n., = *Tr. bolsonensis* SCHEERPELTZ, 1972, syn.n., = *Tr. brunnipennis* SCHEERPELTZ, 1972, syn.n.; *Th. germaini* (COIFFAIT & SÁIZ, 1968) = *Tr. nigronitidus* SCHEERPELTZ, 1972, syn.n.; *Th. guttula* (BERNHAUER, 1922) = *Tr. binotatus* BERNHAUER, 1922, syn.n., = *Tr. catamarcanus* BERNHAUER, 1925, syn.n.; *Th. impressipennis* (FAIRMAIRE & GERMAIN, 1861) = *Tr. iniquipennis* SCHEERPELTZ, 1972, syn.n.; *Th. nitidifrons* (FAUVEL, 1867) = *Tr. ocultus* COIFFAIT & SÁIZ, 1968, syn.n.; *Th. schwabei* (BERNHAUER, 1939) = *Tr. guttifer* SCHEERPELTZ, 1972, syn.n.; *Th. signatus* (ERICHSON, 1834) = *Tr. nitidiventris* FAIRMAIRE & GERMAIN, 1861, syn.n. Lectotypen werden designiert für *Homalotrichus fuscus* SOLIER, 1849, *Trogophloeus andicola* FAIRMAIRE & GERMAIN, 1861, *Tr. angulicollis* FAUVEL, 1867, *Tr. araucanus* FAUVEL, 1867, *Tr. binotatus* BERNHAUER, 1922, *Tr. championi* BERNHAUER, 1912, *Tr. grandipennis* BERNHAUER, 1934, *Tr. guttula* BERNHAUER, 1922, *Tr. impressipennis* FAIRMAIRE & GERMAIN, 1861, *Tr. mersus* FAIRMAIRE & GERMAIN, 1861, *Tr. nitidifrons* FAUVEL, 1867, *Tr. nitidiventris* FAIRMAIRE & GERMAIN, 1861, *Tr. schwabei* BERNHAUER, 1939, *Tr. signatus* ERICHSON, 1834, *Tr. acuticollis* var. *walkeri* BERNHAUER, 1933 und Neotypen für *Trogophloeus asperatus* COIFFAIT & SÁIZ, 1968 (Chile: Araucanía), *Tr. fulgidus* COIFFAIT & SÁIZ, 1968 (Chile: Santiago), *Tr. germaini* COIFFAIT & SÁIZ, 1968 (Chile: Cachapoal), *Tr. ocultus* COIFFAIT & SÁIZ, 1968 (Chile: Valparaiso), *Tr. sulcifrons* COIFFAIT & SÁIZ, 1968 (Chile: Magallanes) und *Homalotrichus obscurus* SOLIER, 1849 (Chile: Santiago). Valide Arten sind illustriert durch Strichzeichnungen der männlichen Terminalia und Genitalien sowie farbige Habitusfotos. Ein Bestimmungsschlüssel für alle behandelten Taxa ist ebenfalls inkludiert.

Introduction

The genus *Thinodromus* KRAATZ, 1857 is distributed worldwide and has proved to be extremely diverse. This diversity is very incompletely known as many geographical areas remain unexplored and their faunas unrevised and undescribed. The genitalia and terminalia have proven to be extremely character-rich and there are even two assemblages of species whose generic affiliation is disputed. The disparity is aptly illustrated by the choice of no less than 13 representative species out of 45 ingroup taxa in the analysis of the *Carpelimus* group of genera by the present author (MAKRANCZY, 2006). The assemblage of species here recognized as the *Thinodromus signatus* species group (named after its earliest described species, *Trogophloeus signatus* ERICHSON, 1834) was previously known as the subgenus *Paracarpalimus* SCHEERPELTZ, 1937 (type species: *Homalotrichus luteipes* SOLIER, 1849). The subgenus *Stenoderophloeus* SCHEERPELTZ, 1972, syn.n. (type species: *Trogophloeus guttifer* SCHEERPELTZ, 1972) was erected for one species. However, both these genus-group names are here considered to be synonyms of *Thinodromus* KRAATZ, 1857. The relationships within the group are poorly determined, mostly for the incompletely mapped diversity in the Neotropical region and insufficient available material. The possible closest relatives are *Th. skottsbergii* (BERNHAUER, 1921) and *Th. juanfernandezianus* MAKRANCZY, 2006, both distributed exclusively in the Juan Fernandez Archipelago. The distribution of the species treated here is confined to the Andes of Chile and Argentina. However, the questionably included *Th. guttula* (BERNHAUER, 1922) is known from adjacent but more tropical

areas of northern Argentina and Bolivia. Biogeographically, the distribution range of *Th. guttula* does not overlap with that of the other species known from the Antarctic (or Southern Temperate) biogeographical region, while the former taxon is only known from a transitional (border) zone of the Chacoan subregion of the Neotropics. It is also important to note that quite a few of the species are extremely common and abundant, in fact almost hegemonistic as regards the *Carpelimus* group of genera within the area.

The systematic position of the *Thinodromus* group has always been controversial, and subject to perhaps the most confusing errors in the current classification of the subfamily. The root of the problem is an alternate spelling (error) of the genus-group name *Carpelimus* LEACH, 1819. The name was originally published without species, and when an available species was included 10 years later, the name was misspelt as *Carpalimus*. Due to the lack of an established concept of the genotype and enforcement of its consistent use, the taxon became misapplied in the sense of *Amisammus* DES GOZIS, 1886, a subgenus that belongs to the genus *Thinodromus* KRAATZ, 1857 today. With the establishment of *Trogophloeus* MANNERHEIM, 1830, where the type species of *Carpelimus* LEACH belongs, the misspelt *Carpalimus* became a widely used subgenus (that however did not include the genotype of *Carpelimus*).

As regards the name *Carpalimus*, it is attributed to STEPHENS (1829: 24) (dated 1 June 1829), rather than CURTIS (1829: 30) (dated June 1829). In both cases the name was cited as originating from Kirby's manuscript and *Oxytelus fuliginosus* GRAVENHORST, 1802 was established then as the type species of *Carpelimus* LEACH by subsequent monotypy, since the other names cited by Stephens and Curtis were nomina nuda. *Carpalimus* is to be treated as a subsequent misspelling of *Carpelimus*, and not an available name. THOMSON (1859: 44) cited Stephens as the author of the name, and made an invalid subsequent type species designation of *Carpelimus*/*Carpalimus*, and was not proposing a new genus. At that time, however, workers started using the name *Carpalimus* in the sense of Thomson, who designated as type *Trogophloeus scrobiculatus* ERICHSON, 1840 (today a synonym of *Thinodromus arcuatus*, which is the type species of *Amisammus*).

Unfortunately, when part of the family Staphylinidae was most recently catalogued (HERMAN 2001b), the species originally included in *Carpalimus* and not revised (usually described around or after 1970) were erroneously placed in *Carpelimus* instead of *Thinodromus*. A similar error was caused by the retention of all unrevised species described under the name *Paracarpalimus* SCHEERPELTZ, 1937 (erected as a subgenus of *Trogophloeus*) in *Carpelimus*. This is because *Trogophloeus* belongs to *Carpelimus* now by its genotype, while the type species of *Paracarpalimus* is actually recognized as a species of the genus *Thinodromus* after HERMAN (1970) re-defined *Carpelimus* and *Thinodromus*.

One of the objectives of the present review is to mend this confusing situation. Many type specimens were lost, have disappeared or were not labelled properly. Considering the rather large distributional area, it was very tricky to identify all the so far named species. Therefore, it may not come as a surprise that this manuscript was in the making for 20 years and some information is still fragmentary.

The present work adopts a rather minimalistic approach, and it is obvious that further work, as well as more material for many species, is much needed before their distributions, bionomics become properly known. It must be noted that the work of COIFFAIT & SÁIZ

(1968), though causing the unfortunate situation with the type material detailed below, have presented the only drawings of genitalia for Neotropical *Thinodromus* in the 20th Century. These illustrations look by today's standards somewhat inconsistent, crude and simplified yet they have proved to be quite useful. In that work, the male genitalia of only 11 species were drawn, which represents not even half of the known taxa in this species group.

To say that the surviving type material is very problematic (in every respect) is an understatement. A frighteningly high percentage of types was either extremely difficult to trace, most likely lost or simply so poorly labelled that it cannot be recognized. The rather recently described species (namely those published by Henri Coiffait and Francisco Sáiz) are most heavily affected. In the attempt to recover as much original type material as possible, the late Dr. Haroldo Toro (14 July 1935 – 6 February 2002) was of an enormous help. His many phone calls in April-July 2000 to Francisco Sáiz in Valparaiso were eventually successful. On 14 August 2000, I was informed by Dr. Sáiz in an e-mail that the principal part of his collection had been left in Santiago and the latest earthquake badly damaged the remaining collection. Dr. Ariel Camousseight, then curator with the National Museum in Santiago, initially (March 2000) informed me that paratypes of only three species were found there: "*Tr. asperatus*", "*Tr. atacamensis*" and "*Tr. ocultus*". It must be noted that the description of "*Tr. ocultus*" was based on a single male specimen, therefore no paratype of that species should exist. When the material was finally received from Santiago, it only included a pair of specimens each of *Th. asperatus* and *Th. atacamensis*, but without any original labels (no locality label, no original label attached by any of the authors, only later curator labels of unknown origin and authenticity), therefore these dubious specimens are not treated as types.

Material and methods

The type material was mostly studied in around 2000–2001 and returned to the respective depositories during those years. Additional types and specimens were examined later. The material treated in this study is deposited in the following collections:

AMNH	American Museum of Natural History (New York, NY, USA)
BMNH	Natural History Museum, London (United Kingdom)
CASC	Department of Entomology, California Academy of Sciences (San Francisco, CA, USA)
CNCI	Canadian National Collection of Insects (Ottawa, ON, Canada)
FMNH	Field Museum of Natural History (Chicago, USA)
HNHM	Hungarian Natural History Museum (Budapest, Hungary)
ISNB	Institut Royal des Sciences Naturelles de Belgique (Bruxelles, Belgium)
MHNG	Muséum d'histoire naturelle, Genève (Geneva, Switzerland)
MZUF	Università degli Studi di Firenze, Museo di Storia Naturale, Sezione di Zoologia "La Specola" (Firenze, Italy)
NMPC	Národní muzeum (National Museum) (Prague, Czech Republic)
NHMW	Naturhistorisches Museum Wien (Vienna, Austria)
SDEI	Senckenberg Deutsches Entomologisches Institut (Müncheberg, Germany)

SEMC	Snow Entomological Collections, University of Kansas (Lawrence, KS, USA)
ZMHB	Museum für Naturkunde – Leibniz Institute for Evolution and Biodiversity Science (Berlin, Germany)
ZMUC	Zoological Museum, University of Copenhagen (Denmark)
ZMUN	Natural History Museum, University of Oslo (Norway)
coll. Assing	private collection of Volker Assing (Hannover, Germany)
coll. Schülke	private collection of Michael Schülke (Berlin, Germany), deposited in ZMHB
coll. Struyve	private collection of Tim Struyve (Mechelen, Belgium)

Label data for primary types and types designated prior to this contribution are listed verbatim, "\" separates labels and ";" separates lines. Text within brackets "[...]" is explanatory and not included in the original labels. An effort was made to supplement locality data with geographical coordinates, but these should be considered as best approximation based on the available resources and not as hard data. NOTE: replacement of this text is suggested because it appears redundant and makes it possible to fit the key on p. 12. Measurements are defined as follows: HW = head width with eyes; TW = head width at temples; PW = maximum width of pronotum; SW = approximate width of shoulders; AW = maximum width of abdomen; HL = head length from front margin of clypeus to the beginning of neck at midline; EL = eye length; TL = length of temple; PL = length of pronotum along midline; SL = length of elytra from shoulder; SC = length of elytra from hind apex of scutellum; FB = forebody length (combined length of head, pronotum and elytra); BL = approximate body length. All measured from dorsal view. For descriptions and measurements, a Leica MZ 12.5 stereoscopic microscope was used. For the line drawings, permanent preparations were made in Euparal mounting medium on plastic cards pinned with the specimens. The genital preparation techniques are detailed in MAKRANCZY (2006). Drawing was done with a Jenalab (Carl Zeiss, Jena) compound microscope and drawing tube (camera lucida). For the colour habitus photographs, a Nikon D4 camera and Novoflex bellows were used with a reverse mounted Rodenstock 50/2.8 Apo-Rodagon N lens, for smaller specimens a Mitutoyo 5/0.14 Apo ELWD lense. Resulting images are focus stacks, aligned and stacked with ZereneStacker.

For Gy. Topál's collecting events in Argentina (1961–62) the booklet TOPÁL (1963) was consulted, this was probably sent out to specialists at the time willing to study part of this vast material. Localities of the "Mision Cientifica Danesa" can be found in MADSEN et al. (1980). Other supplementary data were gathered by personal correspondence, most importantly for Lee Herman's collecting events in Argentina and those by Al Newton and Margaret Thayer in Chile. For the latter, a database exists with approximate geographical coordinates for each event and occasional corrections to the primary data on the labels. The database has "site numbers" (with the prefix ANMT) for each event and for the bulk samples (e. g. traps) an FMHD# (started by Henry S. Dybas, hence his initials in the code to distinguish it from other running numbers in Field Museum at that time). On rare occasions, the additions and corrections are made to the specimen labels as well, but all relevant ones are used in the data listings here. Through the excellent memory and notes of the collectors, plus modern internet resources like satellite images sometimes a more precise type locality is given, thereby slightly deviating from those in the database and given with the label data. It must also be noted that a large part of the 1982–83 Chilean staphylinids collected by Al Newton and Margaret Thayer were sold to

Lee Herman in the early 1980s, while some voucher specimens were retained. The late Herbert Franz also collected in Chile (and apparently there was an ongoing specimen exchange between him and Francisco Sáiz), his surviving notebooks are now digitized in NHMW, so his labels are supplemented with explanatory ones, based on those notes corresponding to the handwritten numbers on the flipsides of labels with "SA" (South America) prefixes, plus the records are supplemented with bionomical notes.

A large portion of the Chilean material originates from Luis Enrique Peña Guzman (1921–1996) and Tomás Nicolás Čekalović Kuschevich (1928–2012), Chilean entomologists who often sold their materials to North American museums. Their label data are infamous for untraceable localities which often suffer from being hand-copied (with errors). Every effort was made to clean these up by correspondences preserved, open access publications and gazetteers. All records are double-checked by internet searches and assigned to the correct areas.

Since the current work includes an unusually high amount of neotype designations, it makes sense to discuss this in an introductory part which then refers to all those cases where the below statements are relevant. Due to the loss of all the holotypes designated by Coiffait & Sáiz (1968), these are the majority of the nominal taxa where primary types must be replaced. Almost all their type material was without locality, thereby making poorly labelled specimens almost impossible to recognize as types. The other problem is multiple locality labels on A. Fauvel's type specimens and P. Germain's locality code numbers, the key for which is absent. Every effort was made to make sure the selected neotypes are consistent with the interpretations of the former name-bearing types. Not only the original publications were considered but specimens (or their fragments) examined from the authors' collections. In certain cases, surviving paratypes or specimens identified by the original authors could be used.

Identification of species relies mostly upon male genitalia. External characters and colour can be a very useful guide but often are highly variable. In the following identification key, one species (*), not formally included in the group but taxonomically treated in this review, is incorporated. For the other species, respective distribution records are summarized as intervals of southern latitudes.

Key to species

1 Species with transverse (about 40 % wider than long) head and strongly transverse, reverse trapezoid pronotum (PW > 0.75 mm). Elytra with a pair of lighter spots [E-Ecuador, ?Peru, Bolivia, N-Argentina, Uruguay]..... ***guttula*** (Bernhauer, 1922)*

– Species with not so transverse head and less wide pronotum (PW < 0.75 mm). Elytra with or without lighter spots or brightly coloured areas 2

2 Anterior pronotal corners protruding in an angle (mostly acute-angled) 3

– Anterior pronotal corners less conspicuous from strict dorsal view, mostly obtuse-angled if present 14

3 Pronotal sides with a second tubercle in anterior half, appearing as an angle at around widest point 4

– Pronotal side without a marked second angle at around anterior 1/3 6

4 Elytra conspicuously short, SL < 0.80 mm [35–38°S] ..... ***struyvei* sp.n.**

– Elytra more regular sized, SL > 0.80 mm 5

5 Elytra with finer and denser punctures [33–43°S] ..... ***impressipennis*** (FAIRMAIRE & GERMAIN, 1861)

– Elytra with more coarse punctures [33–37°S] ..... ***angulicollis*** (FAUVEL, 1867)

6 Elytral setation swirly 7

– Elytral setation straight 8

7 Elytra small and short (SW < 0.73 mm, SL < 0.70 mm) [36–42°S] ..... ***asperatus*** (COIFFAIT & SÁIZ, 1968)

– Elytra normal sized, longer (SW > 0.76 mm, SL > 0.82 mm) [33–34°S] ..... ***fulgidus*** (COIFFAIT & SÁIZ, 1968)

8 Pitch black 9

– Lighter coloured 12

9 Eyes insignificantly larger than temples, more bulging, pronotum more convex 10

– Eyes much larger than length of temples, less convex 11

10 Smaller species (PW < 0.61 mm) [36–42°S] ..... ***germaini*** (COIFFAIT & SÁIZ, 1968)

– Larger species (PW > 0.65 mm) [39–42°S] ..... ***topali*** (SCHEERPELTZ, 1972)

11 Pronotum with a fading microsculpture between punctures, mostly shiny and lustrous [32–40°S] ..... ***obscurus*** (SOLIER, 1849)

– Pronotum completely covered with a coriaceous-colliculate microsculpture between punctures, dull [29–33°S] ..... ***puncticollis*** (SOLIER, 1849)

12 Lighter species (pronotum lighter than head, usually almost as light as elytra, orangish), with large eye (temples significantly less than half eye length) [26–42°S, besides the Andes also on lowlands] ..... ***luteipes*** (SOLIER, 1849)

– Darker, pronotum usually the same colour as head, with smaller eye (temples not smaller than half eye length) 13

13 Smaller species (PW < 0.50 mm) [32–34°S] ..... ***nitidifrons*** (FAUVEL, 1867)

– Larger species (PW > 0.57 mm) [22–55°S, deserts on north, high elevation arid plateaus, low elevations on south] ..... ***andicola*** (FAIRMAIRE & GERMAIN, 1861)

14 Elytra dominantly yellowish-orangish-reddish, except triangular area around scutellum and at shoulders plus an occasional darker apical margin; elytral surface without sculpturing 17

– At least half of elytra dark brown, with lighter areas confined to a smaller spot or an indistinct bordered larger area (appearing infuscate); elytral surface often with oblique/longitudinal depressions and unevenness 18

15 Rather small species, PW < 0.58 mm [36–41°S] ..... ***newtonorum* sp.n.**

– Larger species, PW > 0.59 mm 16

16 Medium sized species, PW between 0.64–0.69 mm, distinctly bordered dark V-shaped area not exceeding 1/3 of elytral surface [36–41°S] ..... ***saizi* sp.n.**

– Large species, PW > 0.76 mm 17

17 Most of elytra reddish, with indistinct borders between lighter and darker areas and apical margin not darkened completely, only outer corners [32–41°S] .... ***magnipennis*** (BERNHAUER, 1915)

– Most of elytra yellowish, with dark area around scutellum extending along suture but elytral apex only very narrowly darkened [37–38°S] ..... ***janinae*** **sp.n.**

18 Elytra without any lighter areas [36–42°S] ..... ***tegens*** **sp.n.**

– Degree of lightening of elytral surface varying between substantial (rare lighter morphs) to none (not fully coloured specimens or those degraded in preservation), larger lighter areas with indistinct borders, but those with a pair of smaller spots sometimes distinct (lighter areas sometimes not apparent but become visible as weaker sclerotized when elytron lifted and seen with light coming through) 19

19 Dorsal surface of elytra about 50% dark coloured, shoulders fully dark, light areas sometimes have rather distinct borders but not bright coloured (rather infuscate) 20

– Dorsal surface of elytra usually less than half lighter coloured, in case of more extended light areas more infuscate 21

20 Elytral setation swirly (abrupt turn laterad) in anterior half, disc of elytra with more or less longitudinal depressions, antennae more elongate, brighter areas rather indistinctly bordered, tibiae dark to medium brown, femora reddish except apices [38–41°S] ..... ***grandipennis*** (BERNHAUER, 1934)

– Elytral setation straight (more or less posteriad directed) in anterior half, elytral disc almost smooth and convex, antennae shorter, brighter areas more distinctly bordered, tibiae black, femora also black at apices [38–43°S] ..... ***kadari*** **sp.n.**

21 Hind part of elytra often light, area occasionally extending further anteriad, but infuscate [33–37°S] ..... ***araucanus*** (FAUVEL, 1867)

– With different colour pattern; elytra with a pair of lighter spots near suture in posterior half or these lighter areas extending further laterad, infuscate and weakening 22

22 Peculiarly long and slender elytra (SW/SL < 0.80). Brighter spots on elytra more anterior, in third fourth of length [34–46°S] ..... ***schwabei*** (BERNHAUER, 1939)

– Less elongate elytra (SW/SL > 0.80). Spot on elytra in posterior 2/5 of length 23

23 Lustrous species, with more elongate elytra, more indistinctly bordered spot, lighter area often radiating to elytral side [36–42°S] ..... ***toroi*** **sp.n.**

– Less lustrous species, with shorter elytra. Smaller, distinct-bordered brighter spot on elytra near suture in third fourths of length but sometimes difficult to observe 24

24 Larger (PW > 0.68 mm), head and pronotum more evenly and densely punctured, interspaces microsculptured, rather dull [32–37°S] .....***signatus*** (ERICHSON, 1834)

– Smaller (PW < 0.67 mm), head and pronotum on elevated areas rather shiny (with loosened punctation and less microsculpture or none) 25

25 Head and pronotum more shiny, elevated areas without microsculpture, pronotum larger and more convex, elytral disc more convex, punctation interspaces shinier. Posterior pronotal corners more broadly rounded, side concave before them [40–46°S] .....***franzi*** **sp.n.**

– Head and pronotum less shiny, only elevated areas more lustrous, pronotum smaller (shorter) and less convex, elytral disc rather flat, punctation interspaces less shiny. Posterior pronotal corners obtuse-angled and narrowly rounded, side almost straight before them [39–43°S] .....***signatoides*** (SCHEERPELTZ, 1972)

Figs 1–2: (1) *Thinodromus guttula* and (2) *Th. impressipennis*, habitus.

Figs 3–4: (3) *Thinodromus angulicollis* and (4) *Th. struyvei* sp.n., habitus.

Figs 5–6: (5) *Thinodromus fulgidus* and (6) *Th. asperatus*, habitus.

Figs 7–8: (7) *Thinodromus obscurus* and (8) *Th. puncticollis*, habitus.

Figs 9–10: (9) *Thinodromus germaini* and (10) *Th. topali*, habitus.

Figs 11–12: (11) *Thinodromus nitidifrons* and (12) *Th. andicola*, habitus.

Thinodromus andicola (FAIRMAIRE & GERMAIN, 1861)
(Figs 12–17)

Trogophloeus andicola FAIRMAIRE & GERMAIN, 1861: 450; FAUVEL, 1867: 32 [= FAUVEL, 1868: 37]
Trogophloeus (*Carpalimus*) *andicola*: BERNHAUER & SCHUBERT, 1911: 96 (as synonym of *T. luteipes*).
Trogophloeus (*Paracarpalimus*) *andicola*: COIFFAIT & SÁIZ, 1968: 436.
Trogophloeus championi BERNHAUER, 1912: 30 (preoccupied).
Trogophloeus cameroni BERNHAUER, 1926: 22 (replacement name), **syn.n.**
Trogophloeus (*Carpalimus*) *cameroni*: SCHEERPELTZ, 1933: 1081.
Trogophloeus acuticollis BERNHAUER, 1927: 230, **syn.n.**
Trogophloeus (*Carpalimus*) *acuticollis*: SCHEERPELTZ, 1933: 1081.
Trogophloeus acuticollis var. *walkeri* BERHNAUER, 1933: 328, **syn.n.**
Trogophloeus sulcifrons GERMAIN, in litt.
Trogophloeus (*Paracarpalimus*) *sulcifrons* COIFFAIT & SÁIZ, 1968: 437, **syn.n.**
Carpelimus sulcifrons: HERMAN, 2001b: 1705 (erroneous generic assignment).
Trogophloeus (*Paracarpalimus*) *atacamensis* COIFFAIT & SÁIZ, 1968: 437, **syn.n.**
Carpelimus atacamensis: HERMAN, 2001b: 1640. (erroneous generic assignment)
Trogophloeus (*Trogophloeus*) *quadripennis* SCHEERPELTZ, 1972: 74, **syn.n.** (under *Carpelimus* in HERMAN, 2001b, erroneous assignment)
Trogophloeus (*Trogophloeus*) *brunnipennis* SCHEERPELTZ, 1972: 76, **syn.n.** (under *Carpelimus* in Herman, 2001b, erroneous assignment)
Trogophloeus (*Trogophloeus*) *bolsonensis* SCHEERPELTZ, 1972: 79, **syn.n.** (under *Carpelimus* in HERMAN, 2001b, erroneous assignment)
Thinodromus andicola: HERMAN, 2001a: 14, HERMAN, 2001b: 1764.

Studied type material. *Trogophloeus andicola* – **Lectotype** ♂ (by present designation): "1463 [Cordilières de Santiago, dans l'eau] \ Trogophloeus ["loeus" unreadable]; andicola; nsp \ Coll. et det. A. Fauvel; R.I.Sc.N.B. 17.479 \ Lectotypus; Trogophloeus; andicola Fairm. & G.; des. Makranczy, 2000 \ Thinodromus; andicola Fairmaire & Germ.; det. Makranczy, 2000" (ISNB); **Paralectotypes** (4): "1463 \ Trogophloeus; andicola; nsp \ Coll. et det. A. Fauvel; R.I.Sc.N.B. 17.479 \ Paralectotypus; Trogophloeus; andicola Fairm. & G.; des. Makranczy, 2000 \ Thinodromus; andicola Fairmaire & Germ.; det. Makranczy, 2000" (2, ISNB); "Cordillière de; Santiago \ andicola; Fairm. type \ Coll. et det. A. Fauvel; T. luteipes; Sol.; R.I.Sc.N.B. 17.479 \ Type \ andicola F. et G.; det Coiff.-Saiz 1965 \ Paralectotypus; Trogophloeus; andicola Fairm. & G.; des. Makranczy, 2000 \ Thinodromus; andicola Fairmaire & Germ.; det. Makranczy, 2000" (1, ISNB); "Syn-; type [round paper disc, curator label with light blue frame] \ 31419 \ Type \ Germain \ Chili \ Trogophloeus; andicola; mihi \ Trogophloeus; andicola F. & G.; P.M. Hammond; det. 1973; Syntype \ Paralectotypus; Trogophloeus; andicola Fairm. & G.; des. Makranczy, 2000 \ Thinodromus; andicola Fairmaire & Germ.; det. Makranczy, 2000" (1, BMNH).

Trogophloeus championi – **Lectotype** ♂ (by present designation): "13 \ Punta Arenas,; Straits of Magellan; Walker \ Championi Brh; Typus. \ Chicago NHMus; M. Bernhauer; Collection \ Lectotypus; Trogophloeus; championi Bernhauer; des. Makranczy, 2015 \ Thinodromus; andicola (Fairm. & Germain); det. Makranczy, 2015" (FMNH); **Paralectotype** (1): "13 \ Punta Arenas,; Straits of Magellan; Walker \ Championi Brh; Typus. \ Chicago NHMus; M. Bernhauer; Collection \ Paralectotypus; Trogophloeus; championi Bernhauer; des. Makranczy, 2015 \ Thinodromus; andicola (Fairm. & Germain); det. Makranczy, 2015" (1 ♀, FMNH).

Trogophloeus acuticollis – **Lectotype** ♀ (by present designation): "Rep. Argentina; Gob. Santa Cruz; II. 1911; C. Bruch [framed] \ 13. \ acuticollis; Bernh. Typus; don. Bruch [beige label] \ Chicago NHMus; M. Bernhauer; Collection \ Lectotypus; Trogophloeus; acuticollis Bernhauer; des. Makranczy, 2015 \ Thinodromus; andicola (Fairm. & Germ.); det. Makranczy, 2015" (FMNH).

Trogophloeus acuticollis var. *walkeri* – **Lectotype** ♂ (by present designation): "Type [red margined disc, curator label] \ Punta Arenas,; Straits of Magellan.; Walker. \ Sharp Coll.; 1905-313. \ Trogophloeus; Walkeri Brh.; Typ. \ Lectotypus; Trogophloeus; walkeri Bernhauer; des. Makranczy, 2013 \ Thinodromus; cameroni (Bernhauer); det. Makranczy, 2013" (BMNH); **Paralectotypes** (3): "Type [copied curator label] \ Punta Arenas,; Straits of Magellan.; Walker. \ Sharp Coll.; 1905-313. \ Trogophloeus; Walkeri Brh.; Typ. \ Paralectotypus; Trogophloeus; walkeri Bernhauer; des. Makranczy, 2013 \ Thinodromus; cameroni (Bernhauer); det. Makranczy, 2013" (1 ♀, BMNH); "Punta Arenas,; Straits of Magellan.; Walker. \ Sharp Coll.; 1905-313. \ Brit. Museum; don. Arrow \ var. Walkeri; Bernh. Typ. \ Chicago NHMus; M. Bernhauer;

Collection \ Lectotypus; Trogophloeus; walkeri Bernhauer; des. Makranczy, 2013 \ Thinodromus; andicola (Fairm. & Germ.); det. Makranczy, 2013" (1 ♂, 1 ♀, FMNH).

Trogophloeus sulcifrons – **Neotype** ♂ (by present designation): "[CHILE:] T. del; Fuego [prov.,] \ [Estancia] Cameron [53°38.5'S 69°39.0'W]; 9-VII-[19]66; [F. Sáiz's handwriting] Cekalovic coll [framed] \ Trogophloeus; sulcifrons C, S [framed] \ Neotypus; Trogophloeus; sulcifrons Coiff. & Sáiz; des. Makranczy, 2015 \ Thinodromus; andicola (Fairm. & Germ.); det. Makranczy, 2015" (NHMW).

Trogophloeus atacamensis – **Neotype** ♂ (by present designation): "[CHILE:] G21 AV \ [El Loa,] Guatin [22°46'20"S 68°05'20"W]; (Atacama); 21/8/[19]63[framed] \ Paratype [red label] \ Trogophloeus; atacamensis; C, S. [framed] \ Neotypus; Trogophloeus; atacamensis C. & S.; des. Makranczy, 2015 \ Thinodromus; andicola (Fairm. & Germ.); det. Makranczy, 2015" (NHMW). **Paratypes** (9, by designation of Coiffait and Sáiz): "G21 AV \ Guatin; (Atacama); 21/8/[19]63 [framed] \ Paratype [red label] \ Trogophloeus; atacamensis; C, S. [framed] \ Paratypus; Trogophloeus; atacamensis C. & S.; ver. Makranczy, 2000 \ Thinodromus; andicola (Fairm. & Germ.); det. Makranczy, 2015" (1 ♂, 1 ♀, FMNH, 1 ♀, NMPC, 1 ♀, ZMHB, 1 ♀, NHMW, 1 ♀, MHNG); "G-21-AV-b \ Guatin 21/8/[19]63; (Atacama) [framed] \ Paratype [red label] \ Trogophloeus; atacamensis; C, S. [framed] \ Paratypus; Trogophloeus; atacamensis C. & S.; ver. Makranczy, 2000 \ Thinodromus; andicola (Fairm. & Germ.); det. Makranczy, 2015" (1 ♂, 1 ♀, BMNH, 1 ♀, ZMUC).

Trogophloeus quadripennis – **Holotype** ♂: "S. Arg. Rio Negro; El Bolson, Topál \ Nr. 468; 27.VI.[19]61 [W slopes of Mt. Piltriquitron, 1000 m, einzeln unter auf Weidegrund liegenden Baumstrünken] \ Foto [pink label] \ Typus; Trogophloeus; quadratipennis; O. Scheerpeltz [dark red card] \ Holotypus [red label] \ Trogophloeus; quadratipennis; n. sp.; det. Scheerpeltz, 1965 \ Holotypus [in red] 1972; Trogophloeus; quadripennis; Scheerpeltz [red framed label] \ Thinodromus; andicola (Fairm. & Germ.); det. Makranczy, 2015" (HNHM); **Paratypes** (19): "S. Arg. Rio Negro; El Bolson, Topál \ Nr. 468; 27.VI.[19]61 \ Cotypus; Trogophloeus; quadratipennis; O. Scheerpeltz [pink card] \ ex coll.; Scheerpeltz [light blue label] \ Thinodromus; andicola (Fairm. & Germ.); det. Makranczy, 2015" (2, NHMW), same but without the light blue label and with "Paratypus [in red] 1972; Trogophloeus; quadripennis; Scheerpeltz [red framed label]" (7, HNHM); "S. Arg. Rio Negro; El Bolson, Topál \ Nr. 110; 27.X.[19]61 [W slopes of Mt. Piltriquitron, 1170 m, aus Moos an Bäumen und anderen Objekten, die vom Wasser einer Baches besprüht waren, am Baum eines *Nothofagus pumilio*-Waldes] \ Cotypus; Trogophloeus; quadratipennis; O. Scheerpeltz [pink card] \ Paratypus [in red] 1972; Trogophloeus; quadripennis; Scheerpeltz [red framed label] \ Thinodromus; andicola (Fairm. & Germ.); det. Makranczy, 2015" (1 ♂, 1, HNHM); "S. Arg. Rio Negro; El Bolson, Topál \ Nr. 557; 16.IX.[19]61 [W slopes of Mt. Piltriquitron, 820 m, einzeln im Boden unter Holzstücken] \ ex coll.; Scheerpeltz [light blue label] \ Cotypus; Trogophloeus; quadratipennis; O. Scheerpeltz [pink card] \ quadatipennis; Scheerp. [light green card] \ Paratypus; Trogophloeus; quadripennis Scheerp.; ver. Makranczy, 2015 \ Thinodromus; andicola (Fairm. & Germ.); det. Makranczy, 2015" (1, NHMW), same but without light green card (4, NHMW); "S. Arg. Rio Negro; El Bolson, Topál \ Nr. 27; 26.X.[19]61 [W slopes of Mt. Piltriquitron, 1000 m, gesiebt aus Bodenstreu in einem *Nothofagus antarctica–Berberis buxifolia*-Gesträuch] \ Cotypus; Trogophloeus; quadratipennis; O. Scheerpeltz [pink card] \ Paratypus [in red] 1972; Trogophloeus; quadripennis; Scheerpeltz [red framed label] \ Thinodromus; andicola (Fairm. & Germ.); det. Makranczy, 2015" (1, HNHM); "S. Arg. Rio Negro; El Bolson, Topál \ Nr. 30; 13.XI.[19]61 [W slopes of Mt. Piltriquitron, 1170 m, gesiebt aus Bodenstreu eines *Nothofagus pumilio*-Waldes nahe seiner unteren Grenze] \ Cotypus; Trogophloeus; quadratipennis; O. Scheerpeltz [pink card] \ Paratypus [in red] 1972; Trogophloeus; quadripennis; Scheerpeltz [red framed label] \ Thinodromus; andicola (Fairm. & Germ.); det. Makranczy, 2015" (1, HNHM); "S. Arg. Rio Negro; El Bolson, Topál \ Nr. 42; 16.XI.[19]61 [W slopes of Mt. Piltriquitron, 1150 m, gesiebt aus Bodenstreu eines *Maytenus boaria*-Waldes mit Berberis darwini und *Nothofagus antarctica*, bei der Quelle] \ Cotypus; Trogophloeus; quadratipennis; O. Scheerpeltz [pink card] \ Paratypus [in red] 1972; Trogophloeus; quadripennis; Scheerpeltz [red framed label] \ Thinodromus; andicola (Fairm. & Germ.); det. Makranczy, 2015" (1, HNHM).

Trogophloeus bolsonensis – **Holotype** (♀): "S. Arg. Rio Negro; El Bolson, Topál \ Nr. 109; 24.X.[19]61 [W slopes of Mt. Piltriquitron, 700 m, aus grasigen Bodenmaterial eines Schaf-Auslaufes] \ Foto [pink label] \ Typus; Trogophloeus; bolsonensis; O. Scheerpeltz [dark red card] \ Holotypus [red label] \ Trogophloeus; bolsonensis; n. sp.; det. Scheerpeltz, 1965 \ Holotypus [in red] 1972; Trogophloeus; bolsonensis; Scheerpeltz [red framed label] \ Thinodromus; andicola (Fairm. & Germ.); det. Makranczy, 2015" (HNHM).

Trogophloeus brunnipennis – **Holotype** ♂: "S. Arg. Rio Negro; Norquinco, Topál \ Nr. 235; 21.I.[19]61 [41°51'S 70°54'W, 900 m, auf einer schlammigen Sandbank des Flusses herausgetreten] \ Foto [pink label] \

Typus; Trogophloeus; brunneipennis; O. Scheerpeltz [dark red card] \ Holotypus [red label] \ Trogophloeus; brunneipennis; n. sp.; det. Scheerpeltz, 1965 \ Holotypus [in red] 1972; Trogophloeus; brunnipennis; Scheerpeltz [red framed label] \ Thinodromus; andicola (Fairm. & Germ.); det. Makranczy, 2015" (HNHM); **Paratypes** (7): "S. Arg. Rio Negro; Norquinco, Topál \ Nr. 235; 21.I.[19]61 \ Cotypus; Trogophloeus; brunnipennis; O. Scheerpeltz [pink card] \ Paratypus [in red] 1972; Trogophloeus; brunnipennis; Scheerpeltz [red framed label] \ Thinodromus; andicola (Fairm. & Germain); det. Makranczy, 2015" (2 ♂, 1, HNHM); "S. Arg. Rio Negro; El Bolson, Topál \ Nr. 86; 27.VII.[19]61 \ ex coll.; Scheerpeltz [light blue label] \ Cotypus; Trogophloeus; brunnipennis; O. Scheerpeltz [pink card] \ brunnipennis; Scheerp. [light green card] \ Paratypus; Trogophloeus; brunnipennis Scheerp.; ver. Makranczy, 2015 \ Thinodromus; andicola (Fairm. & Germain); det. Makranczy, 2015" (2, NHMW), same but without light green card (1, NHMW); "S. Arg. Rio Negro; El Bolson, Topál \ Nr. 51; 6.II.[19]61 [langst dem Arroyo Negro, 350 m, gesiebt aus Bodenstreu von *Myrceugenia exsupca*] \ Cotypus; Trogophloeus; brunnipennis; O. Scheerpeltz [pink card] \ Paratypus [in red] 1972; Trogophloeus; brunnipennis; Scheerpeltz [red framed label] \ Thinodromus; andicola (Fairm. & Germain); det. Makranczy, 2015" (1, HNHM, teneral).

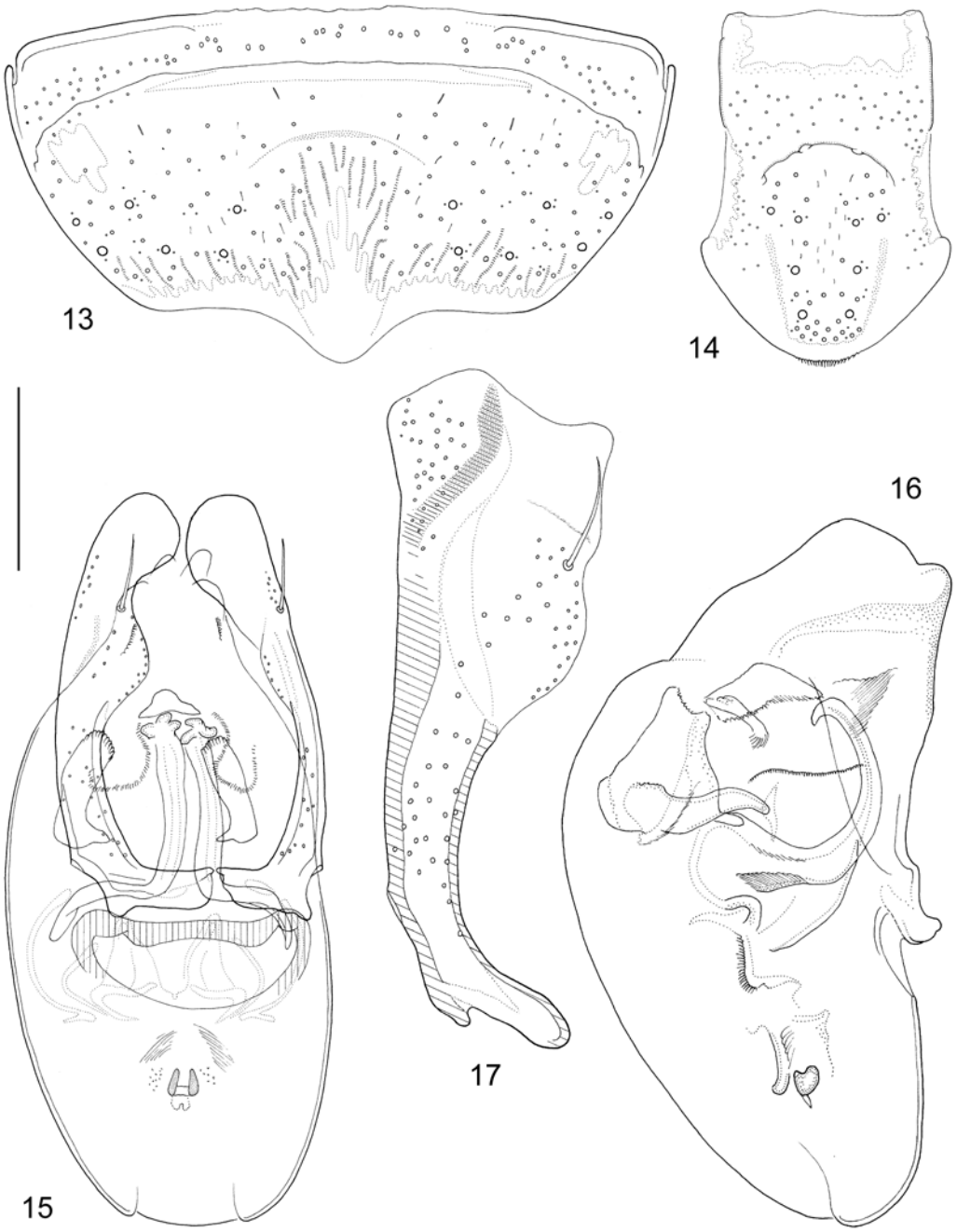
Additional material. ARGENTINA: Jujuy prov., Volcán, 2400 m [23°56'50"S 65°29'40"W], I.1920, leg. V. Weiser (2 ♂, 1 ♀, 15, NMPC, 1, AMNH, 1, BMNH, 1, FMNH, 1, MHNG, 1, NHMW, 1, ZMUC); Neuquén prov., SE of Lago Tromen, Rodeo Grande, 900 m [39°42'S 71°11'W]; 12.III.1979, leg. Mision Cientifica Danesa (E. Nielsen & al.) (18) (2, ZMUC); Rio Negro prov., 11 km W San Carlos de Bariloche, Cerro Otto [41°08'40"S 71°22'30"W], 14.I.1972, leg. L. Herman (845), leaf litter (5, AMNH); Rio Negro prov., 20 km E San Carlos de Bariloche, Río Ñirihuau [41°09'50"S 71°07'50"W], 15.I.1972, leg. L. Herman (853), leaf litter in river bed (17, AMNH), same but (854) (1, AMNH); Chubut prov., 35 km E Esquel, 720 m [42°50'20"S 71°05'00"W], 18.XI.1966, leg. E.I. Schlinger & M.E. Irwin (1, CASC); Santa Cruz prov., 130 km S Fitz Roy, Tres Cerros [48°07'S 67°56'W], 10.II.1979, leg. Mision Cientifica Danesa (E. Nielsen & al.) (43) (4, ZMUC, 1, NHMW); Tierra del Fuego prov., Estancia Viamonte [54°01.0'S 67°20.5'W], VIII.1927–II.1928, leg. P.W. Reynolds (1, BMNH, 1, FMNH); Tierra del Fuego prov., Atlantic coast S of Estancia Viamonte, Cabo Auricosta, 2 m [54°03'S 67°19'W], 23.I.1979, leg. Mision Cientifica Danesa (E. Nielsen & al.) (36) (1 ♂, ZMUC); Tierra del Fuego prov., Ushuaia, Lapataia, 20 m [54°48.0'S 68°17.5'W], 1.II.1979, leg. Mision Cientifica Danesa (E. Nielsen & al.) (34) (3, ZMUC).

CHILE: El Loa, Talabre [23°19.5'S 67°50.0'W], 28.II.1961, leg. L. Peña (1♂, ZMUC), same but 1–3. VI.1953 (5, FMNH); El Loa, Tumbre, 3700 m [23°19.5'S 67°48.0'W], 1–5.X.1955, leg. L. Peña (4, FMNH, 1 ♂, 1 ♀, AMNH, 1 ♂, MHNG); Cordillera prov., Cajon del Maipo, Umgebung Embalse el Yeso, 2700 m [33°37.5'S 70°01.0'W], 17.XI.1968, leg. H. Franz (Sa 200a), sifted from grass underneath a dripping (from snowmelt) rock, above the lake (1 ♂, 1 ♀, 2, NHMW); Cordillera prov., Cajon del Maipo, Umgebung Embalse el Yeso, 2600 m [33°40'S 70°05'W], 17.XI.1968, leg. H. Franz (Sa 200b), sifted from moss and grass at waterfall, at the lower end of the lake (1, NHMW); Cordillera prov., Lo Valdés, Valle del Maipo, 2100 m [33°48'40"S 70°01'20"W], 28.III.1956, leg. L.E. Peña (63, FMNH); Cordillera prov., Lo Valdés, Baño Colina [33°49.5'S 70°03.0'W], 2–3.IV.1959, leg. L.E. Peña (170, FMNH); Valdivia prov., Montes orient. [?Greater Patagonian trail, 39°33'S 71°43'W], 5.III.1953, leg. A.A. Diaz (1, NHMW); Última Esperanza prov., Laguna Figueroa [51°22.5'S 72°26.0'W], 13.XII.1960, leg. T. Čekalović (1 ♂, 3, NHMW, 2, SEMC), same but 13.XII.1960 (2 ♀, 1, NHMW); Última Esperanza, Comuna Río Rubens, Monte Alto [52°01.5'S 71°47.5'W], 7–11.III.1969, leg. L. Peña (1, FMNH); Última Esperanza, Comuna Río Rubens [52°02.5'S 71°56.0'W], 27.II.1969, leg. L. Peña (1, FMNH); Última Esperanza prov., Parque Nacional Torres del Paine [51°00'S 73°03'W], 18–20.I.1979, leg. A. de Chambrier (Ac/38) (2, MHNG); Última Esperanza prov., Torres del Paine, [Estancia] Cerro Guido [50°56'10"S 72°27'30"W], 10.I.1968, leg. C.W. O'Brien (1, AMNH); Última Esperanza prov., Torres del Paine, Cerro Castillo [51°15'10"S 72°20'30"W, Río Don Guillermo], 13.I.1968, leg. C.W. & L. O'Brien, under wood (3, AMNH); Magallanes, Rio Verde [52°53'S 72°26'W], 29.VIII.1976, T. Čekalović (2, AMNH); Magallanes, Punta Arenas [53°09'S 70°57'W], 23.IX.1962, T. Čekalović (17, CNCI); Magallanes, Laguna Blanca, chorrillo Esperanza [52°19'10"S 71°02'00"W], 25.II.1962, leg. T. Čekalović (1 ♂, 1, NHMW); Magallanes prov., Estancia Maria [52°33'S 71°32'W], 20.III.1958, leg. L.E. Peña (6, FMNH, 1, NHMW), same but 26.III.1958 (2, FMNH); Magallanes prov., Laguna Amarga [50°58.5'S 72°46.0'W], 8.IV.1962, leg. T. Čekalović (1, CNCI); Magallanes prov., Laguna Escondida [51°54'50"S 72°10'20"W], 8.III.1969, leg. T. Čekalović (1, AMNH), same but ex *Nothofagus antarctica* (3, AMNH); Tierra del Fuego prov., Porvenir [53°17'S 70°22'W], 14.I.1979, leg. A. de Chambrier (Ac/39) (2, MHNG); Tierra del Fuego prov., Estancia Camerón [53°38.5'S 69°39.0'W] 9.VII.1966 (1 ♂, AMNH, 1 ♂, BMNH); Tierra del Fuego prov., Puerto Percy [52°53'S 70°09'W] 11–13.

XII.1960, leg. L.E. Peña (3, FMNH); Antártica Chilena prov., Isla Navarino, Puerto Williams [54°56'S 67°37'W], 14.VIII.1976, leg. T. Čekalović (1 ♂, 8, AMNH, 1 ♂, 1 ♀, NHMW, 8, CNCI), same but 20–30. XI.1959, leg. L.E. Peña (1 ♂, 3, FMNH).

Redescription. Measurements (in mm, n = 10): HW = 0.60 (0.58–0.63); TW = 0.59 (0.57–0.62); PW = 0.66 (0.63–0.69); SW = 0.82 (0.78–0.89); AW = 0.92 (0.85–0.98); HL = 0.43 (0.41–0.45); EL = 0.19 (0.18–0.20); TL = 0.12 (0.11–0.13); PL = 0.54 (0.52–0.56); SL = 0.88 (0.76–0.95); SC = 0.85 (0.73–0.92); FB = 1.88 (1.74–1.99); BL = 3.60 (3.36–3.90). Habitus as in Fig. 12. Lustre and colour. Body weakly lustrous, rather finely and densely punctate and microsculptured, but interspaces on elytra and more elevated parts of pronotum occasionally shinier. Head and abdomen blackish dark brown, pronotum, mouthparts and antennae dark brown, elytra and legs reddish medium to dark brown. Shape and sculpture. Head with prominent supraantennal tubercles and arcuate longitudinal impressions mediad, eyes almost a third longer than temples, latter imperfectly rounded, slightly bulging. Neck delineated with occipital groove, vertex before neck insignificantly impressed. Antennae with middle segments a third longer than broad, penultimate articles about as long as broad. Pronotum with anterior corners small but curved and protruding, sides gently arched anteriorly, insignificantly concave in posterior half; midline slightly elevated (mostly in posterior half), impressions at its base, posteriorly bordered by arcuately elevated ridge; besides middle of midline also two shallow longitudinal impressions, laterally bordered by small (often longitudinally elongate) elevations; near middle of pronotal side feebly impressed. Elytra rather parallel-sided, apically with thin marginal bead, gently arched (more strongly in outer half, there with membranous lobe); surface rather even, with anterior third of disc shallowly impressed. Apex of abdominal tergite VII with medially somewhat broader palisade fringe. Punctation and microsculpture. Clypeus without apparent microsculpture; punctation similar to that of vertex, epistomal suture inconspicuous. Head and pronotum punctate, sparsely but rather strongly, density varying greatly: more dense parts with punctures almost joining, on looser parts interspaces several times larger than puncture diameters. No apparent microsculpture. Neck with fine but strong coriaceous microsculpture (slightly transverse cells), less shiny than rest of head. Elytra with slightly stronger and more even punctation, puncture interspaces about the same as puncture diameters, slight ruggedness only at scutellum. Abdomen with strong and transverse coriaceous microsculpture (also on basal ridges) but fading out on more elevated parts, medium fine, deep but sparse punctation apparent on shinier parts. Pubescence. Body setation short and sparse, except stronger bristles near anterior pronotal corner and at mid-length of side. Elytral setation directed posteriad but in outer posterior corners turning postero-laterad, side with a few slightly stronger setae (inconspicuous). Abdominal tergites apically with longer, postero-mediad directed setae. Primary and secondary sexual features. Male sternite VIII as in Fig. 13, male tergite X as in Fig. 14. Aedeagus as in Figs 15–17.

Distribution and bionomics. The species is known from both Argentina and Chile, between latitudes 22–55° South but at more northern latitudes occurs at higher altitudes. In the Atacama at small flows of water across the desert. In the High Andes it was sifted from grass underneath rocks dripping from snowmelt and from moss and grass at waterfall. At the southern locations it was found in *Nothofagus pumilio* forest, from mosses on trees sprinkled by water and sifted from litter at spring in *Maytenus boaria*



Figs 13–17: *Thinodromus andicola*: (13) male sternite VIII; (14) male tergite X; (15) aedeagus, frontal view; (16) median lobe, lateral view; (17) left paramere, lateral view, magnified (1.5 ×). Scale bar = 0.1 mm (17) 0.15 mm (15–16), 0.2 mm (14), 0.26 mm (13).

forest with *Berberis darwini* and *Nothofagus antarctica*, litter of *Myrceugenia exsupca*, moss and grass clumps. It is also encountered under wood, on muddy river banks and under trunks on grassy soil.

Comment. This is an extremely variable species. Aedeagus preparations from Atacama to Antártica were compared and revealed no clear difference. Although there is substantial variation in elytral length and colour, unambiguous external distinguishing features are absent. The single available type specimen of "*Trogophloeus acuticollis*" is a female, although there is a fragmentary specimen labelled "*acuticollis* var." from "Patagonia, S. Cruz" without type status (FMNH). Of the original material of "*Trogophloeus sulcifrons*", only specimen fragments were recovered (without apparent type status) and a microscopic slide preparation that could not be associated with the specimen remnants with certainty. Nevertheless, these allowed pinning down the identity of this taxon. A specimen seen and identified by the original authors (but not mentioned in the description) is designated as neotype. The holotype of "*Trogophloeus atacamensis*" is lost. Luckily, original material of what is believed to be genuine paratypes could be obtained, although their labelling was very incomplete. These specimens allow the designation of a neotype with the same locality and label data. The holotype of "*Trogophloeus bolsonensis*" is a female and appears to be a strongly brachypterous form of the same species.

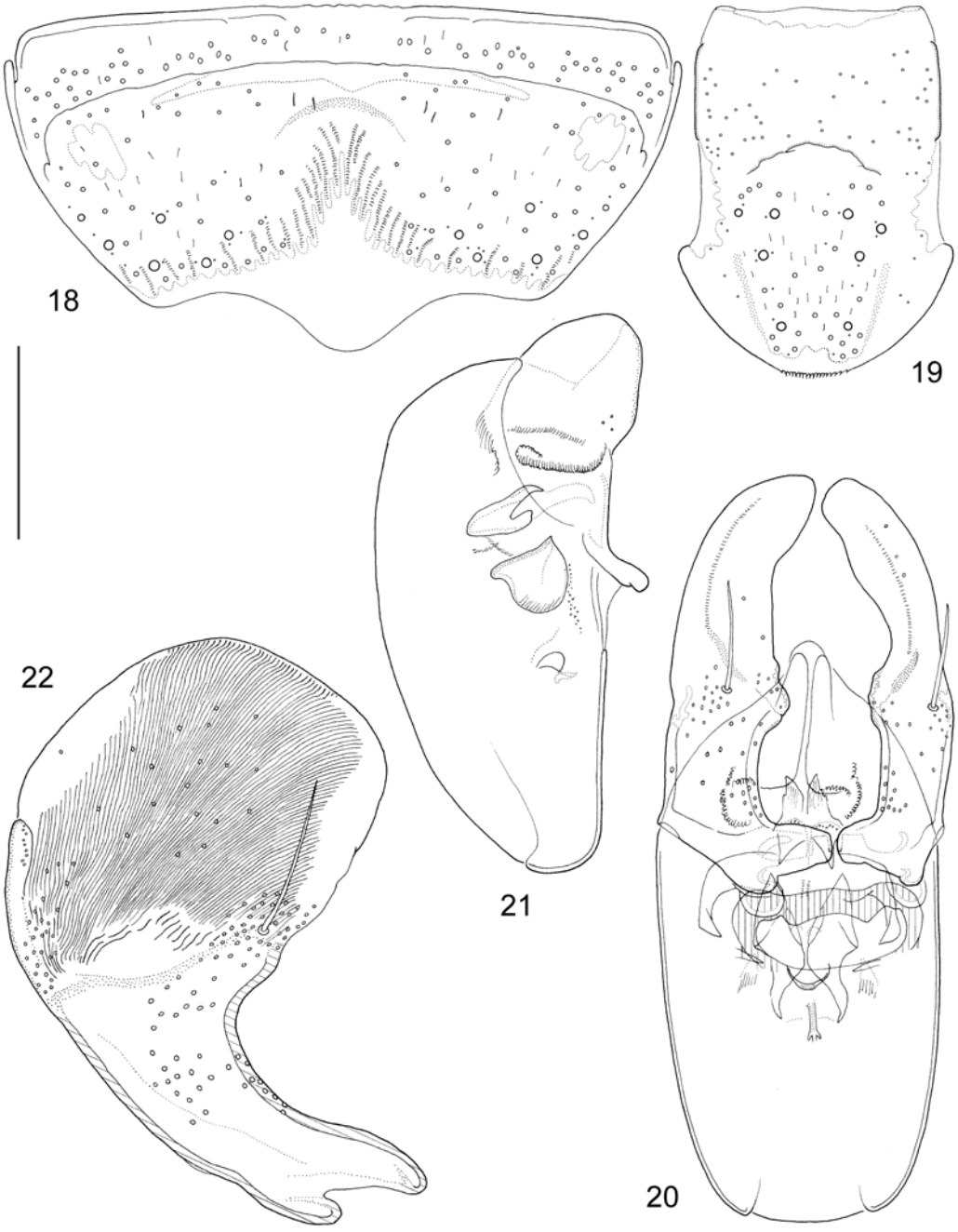
Thinodromus angulicollis (Fauvel, 1867)

(Figs 3, 18–22)

Trogophloeus angulicollis Fauvel, 1867: 31 [= Fauvel, 1868: 36].
Trogophloeus (*Thinodromus*) *angulicollis*: Bernhauer & Schubert, 1911: 94.
Trogophloeus (*Paracarpalimus*) *angulicollis*: Coiffait & Sáiz, 1968: 442.
Thinodromus angulicollis: Herman, 1970: 387, Herman, 2001b: 1761.

Type material. Lectotype ♂ (by present designation): "Santiago; Quillota; Concepcion \ angulicollis; Fvl. \ R. I. Sc. N. B. 17.479; Trogophloeus; Coll. et det. A. Fauvel \ Type \ Lectotypus; Trogophloeus; angulicollis Fauvel; des. Makranczy, 2000 \ Thinodromus; angulicollis Fauvel; det. Makranczy, 2000" (ISNB).

Redescription. Measurements (in mm, n = 1): HW = 0.60; TW = 0.55; PW = 0.62; SW = 0.80; AW = 0.93; HL = 0.39; EL = 0.20; TL = 0.10; PL = 0.55; SL = 0.90; SC = 0.87; FB = 1.88; BL = 3.66. Habitus as in Fig. 3. Lustre and colour. Body moderately lustrous, punctate and microsculptured, only small puncture interspaces on elytra and more elevated parts on pronotum shinier. Head dark brown, pronotum, elytra and abdomen reddish dark brown (pronotum or even elytra occasionally lighter), legs, mouthparts and basal antennomeres reddish medium brown, rest of antennomeres dark brown. Shape and sculpture. Head with prominent supraantennal tubercles and arcuate longitudinal impressions mediad, eyes almost 2 × as long as temples, latter almost perfectly rounded arched but not bulging. Neck delineated with occipital groove, vertex before neck impressed longitudinally. Antennae with middle segments slightly elongate, penultimate articles about as long as broad. Pronotum with anterior corners moderately protruding, slightly angled at anterior 1/3 also marked with a small tubercle, arcuate sides concave before posterior corners; midline more or less elevated on entire length, disc slightly impressed at the sides of midline, strongly impressed posteriorly, there bordered by arcuately elevated prebasal ridge, at the middle of sides impressed, two



Figs 18–22: *Thinodromus angulicollis*: (18) male sternite VIII; (19) male tergite X; (20) aedeagus, frontal view; (21) median lobe, lateral view; (22) left paramere, lateral view, magnified (1.5 ×). Scale bar = 0.1 mm (22) 0.15 mm (20–21), 0.17 mm (19), 0.2 mm (18).

arcuate elevations across middle of disc halves. Elytral sides gently arcuate, apically with thin marginal bead, rather arched, at outer half with membranous lobe; surface quite uneven, slight impressions from shoulders towards middle of suture (but not reaching it) plus longitudinally slightly depressed in middle to almost insignificantly depressed posterior disc. Apex of abdominal tergite VII with medially broader palisade fringe. Punctation and microsculpture. Clypeus without discernible microsculpture, epistomal suture carved in delineating clypeus from vertex. Head and pronotum shiny but punctate, punctures on head deep and more dense, average interspaces much less than puncture diameters. Pronotum with deep punctures, in varying density, on more elevated parts punctures looser and interspaces exceeding puncture diameters. Neck with fine but strong coriaceous microsculpture with very transverse cells, dull. Elytra with slightly stronger and more even punctation, puncture interspaces somewhat less than puncture diameters, slight ruggedness around scutellum. Abdomen with strong and very transverse coriaceous microsculpture (also on basal ridges) but fading out posteriorly and on more elevated parts, very fine and sparse punctation apparent on shinier parts. Pubescence. Body setation short and sparse, except a stronger bristle near anterior pronotal corner and another at the bump at anterior 1/3 of side. Elytral setation directed posteriad but in outer posterior corners turning postero-laterad, side with a few stronger setae. Abdominal tergites apically with longer, postero-mediad directed setae. Primary and secondary sexual features. Male sternite VIII as in Fig. 18, male tergite X as in Fig. 19. Aedeagus as in Figs 20–22.

Distribution and bionomics. The species is known from a single specimen but multiple literature localities in Chile (impossible to know which one refers to that exemplar), between latitudes 33–37° South. No bionomical information is recorded.

Comment. Not found since its description and is believed to be a distinct species based on examination of one specimen. Similar in size to the common *Th. impressipennis* but has the surface sculpture of the smaller and brachypterous *Th. struyvei* sp.n..

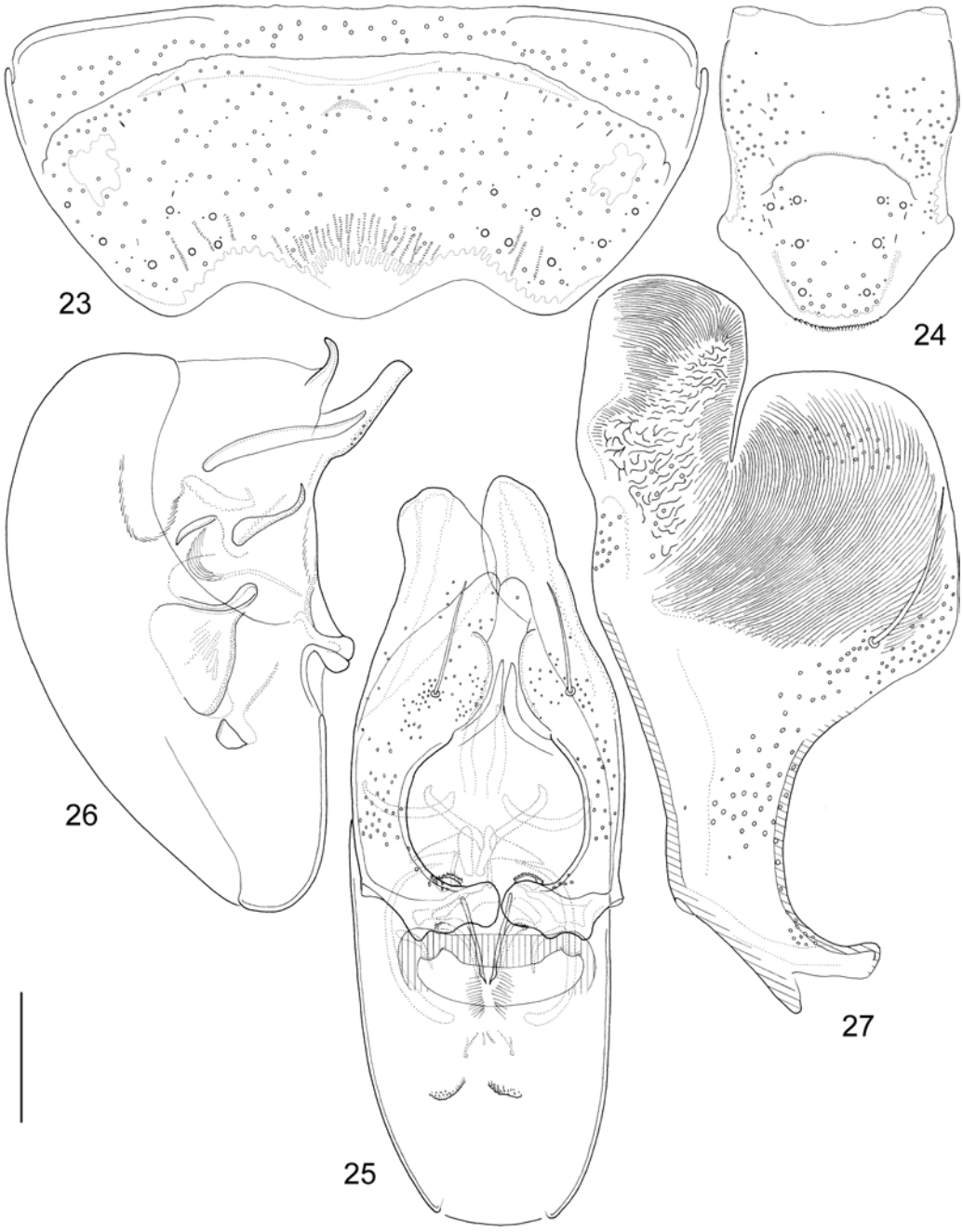
Thinodromus araucanus (Fauvel, 1867)

(Figs 23–27, 64, 157)

Trogophloeus araucanus Fauvel, 1867: 30 [= Fauvel, 1868: 35].
Trogophloeus (*Thinodromus*) *araucanus*: Bernhauer & Schubert, 1911: 94.
Trogophloeus (*Paracarpalimus*) *araucanus*: Coiffait & Sáiz, 1968: 441.
Thinodromus araucanus: Herman, 1970: 387, Herman, 2001b: 1761.

Type material. Lectotype ♂ (by present designation): "Santiago; Quillota; Concepcion \ araucanus; Fvl. \ R. I. Sc. N. B. 17.479; Trogophloeus; Coll. et det. A. Fauvel \ Ex-Typis \ Lectotypus; Trogophloeus; araucanus Fauvel; des. Makranczy, 2000 \ Thinodromus; araucanus Fauvel; det. Makranczy, 2000" (ISNB). **Paralectotype** (1): "Santiago; Quillota; Concepcion \ Coll. et det. A. Fauvel; T. araucanus; Fauvl.; R. I. Sc. N. B. 17.479 \ Ex-Typis \ Paralectotypus; Trogophloeus; araucanus Fauvel; des. Makranczy, 2000 \ Thinodromus; araucanus Fauvel; det. Makranczy, 2000" (1 ♀, ISNB).

Additional material. CHILE: Santiago, Laguna de Acúleo, Quebrada El Árbol [33°51.5'S 70°53.0'W], X.1964, leg. F. Sáiz? (1 ♂, 5 ♀, NHMW, 1 ♂, 1 ♀, BMNH, 1 ♂, 1 ♀, FMNH, 1 ♂, 1 ♀, NMPC, 1 ♂, 1 ♀, ZMHB); Colchagua prov., Puente Negro, Río Tinguiririca, 34.677°S 70.871°W, 1.XII.2013, leg. T. Struyve, large river with huge gravel banks, leafpacks sifted (1, coll. Struyve).



Figs 23–27: *Thinodromus araucanus*: (23) male sternite VIII; (24) male tergite X; (25) aedeagus, frontal view; (26) median lobe, lateral view; (27) left paramere, lateral view, magnified (1.5 ×). Scale bar = 0.1 mm (27) 0.15 mm (25–26), 0.17 mm (24), 0.19 mm (23).

Redescription. Measurements (in mm, n = 10): HW = 0.73 (0.71–0.75); TW = 0.69 (0.67–0.71); PW = 0.73 (0.70–0.76); SW = 0.97 (0.92–1.00); AW = 1.11 (1.06–1.14); HL = 0.48 (0.46–0.50); EL = 0.23 (0.22–0.25); TL = 0.13 (0.12–0.14); PL = 0.62 (0.59–0.64); SL = 1.07 (1.01–1.12); SC = 1.03 (0.97–1.08); FB = 2.20 (2.13–2.28); BL = 4.19 (3.91–4.51). Habitus as in Fig. 64. Lustre and colour. Body weakly lustrous for the most part, punctation mostly fine but interspaces strongly microsculptured, elytra more roughly punctured with shinier interspaces. Head and abdomen blackish dark brown, pronotum very slightly lighter, legs, mouthparts and basal antennomeres reddish medium to dark brown, rest of antenna dark brown. Elytra dark brown at scutellum, turning reddish-yellowish towards apical band. Shape and sculpture. Head with prominent supraantennal tubercles and arcuate longitudinal impressions mediad, eyes about a third longer than temples, latter imperfectly rounded, slightly bulging. Neck delineated with occipital groove, vertex impressed before neck. Antennae with middle segments a third longer than broad, penultimate articles slightly elongate. Pronotum with anterior corners obtuse-angled and narrowly rounded, sides arcuate in anterior half, concave in posterior half; midline slightly elevated, more strongly posteriorly, interrupted in middle by transversal, V-shaped impression, disc strongly, obliquely impressed at the sides of posterior part, posteriorly bordered by arcuately elevated ridge; besides anterior midline two small elevations. Elytra slightly dilating posteriorly, apically with thin marginal bead, straight and oblique in inner half, towards corner moderately arched, in outer 3/5 with membranous lobe; surface appearing rather even, shallow impressions on disc in anterior third from shoulders. Apex of abdominal tergite VII with medially broader palisade fringe. Punctation and microsculpture. Clypeus with fine and dense colliculate microsculpture (isodiametric cells), epistomal suture as a slightly incarved line. head and pronotum punctate, dense coriaceous microsculpture on surface, shinier on elevated parts. Neck with fine coriaceous microsculpture (transverse cells), less shiny than rest of head. Elytra with slightly stronger and more even punctation, average puncture interspaces less than puncture diameters, slight coriaceous microsculpture only behind scutellum. Abdomen with slightly transverse coriaceous microsculpture, dense but fine punctation, average interspaces 2−3 × puncture diameters, looser on elevated parts. Pubescence. Body setation moderately short and medium dense (sparser on elytra), except a stronger bristle near anterior pronotal corner and two strong bristles near mid-length of side. Elytral setation directed posteriad but in outer posterior corners turning postero-laterad, side with a few stronger setae. Abdominal tergites apically with longer, postero-mediad directed setae. Primary and secondary sexual features. Male sternite VIII as in Fig. 23, male tergite X as in Fig. 24. Aedeagus as in Figs 25–27. Spermatheca as in Fig. 157.

Distribution and bionomics. Only known from Chile, between latitudes 33–37° South. Bionomical notes only exist for the recently collected specimen. It was sifted from leafpacks accumulating at extensive gravel bank of a river, where it was collected together with *Th. magnipennis*, both very rare species.

Comment. The name of the species suggests that the original specimens are from the vicinity of Concepción. Quillota lies 80 km NW of Santiago, but Concepción is 450 km SSW of Santiago (and still in the northern part of historical Araucania).

Thinodromus asperatus (COIFFAIT & SÁIZ, 1968)
(Figs 6, 28–32, 158)

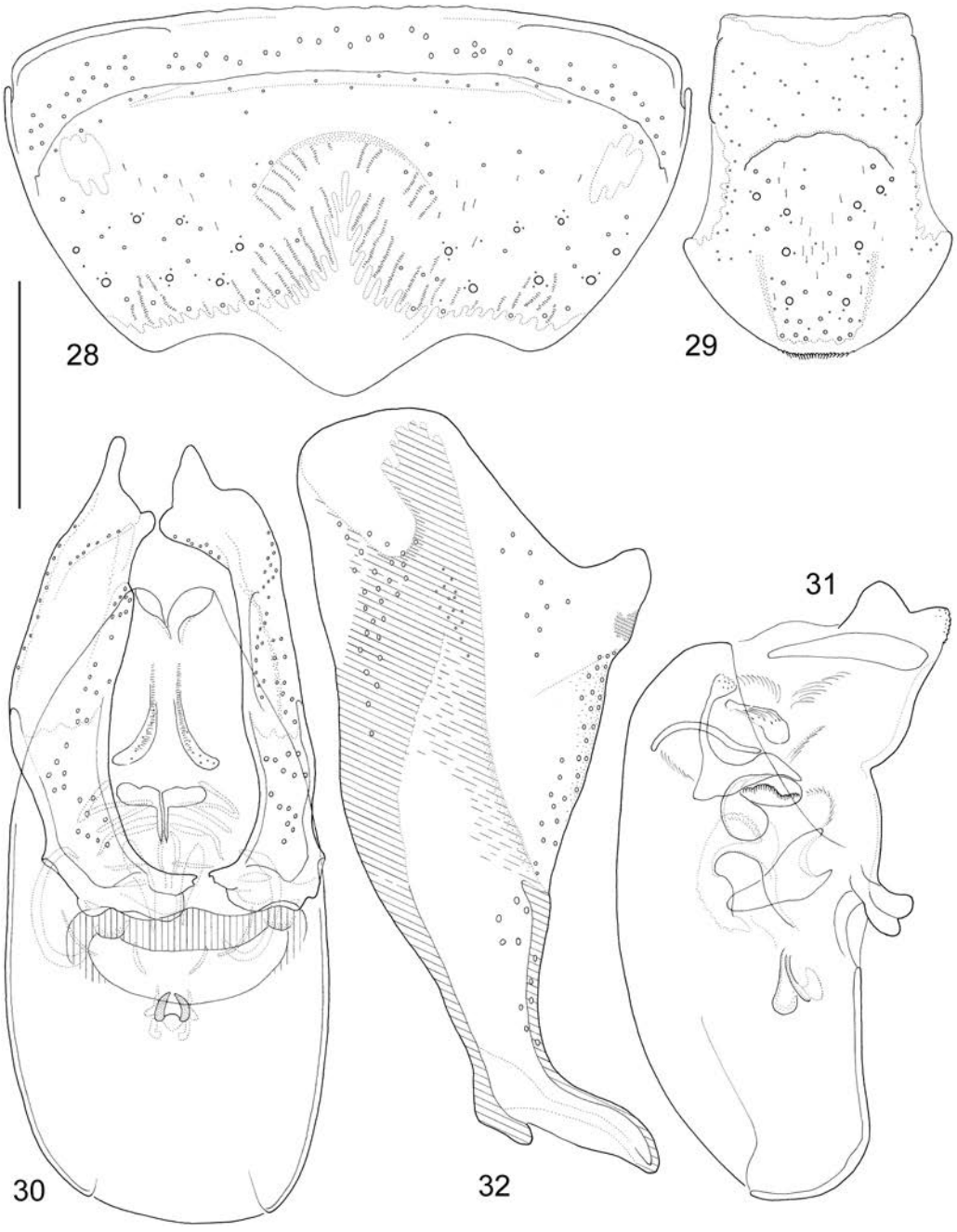
Trogophloeus asperatus FAUVEL, in litt.
Trogophloeus (*Paracarpalimus*) *asperatus* COIFFAIT & SÁIZ, 1968: 438.
Carpelimus asperatus: HERMAN, 2001b: 1640. (erroneous generic assignment)

Type material. Neotype ♂ (by present designation): "Araucanie; sept[entrionale, curator copied label] \ asperatus; Fauvel. [curator copied label] \ Coll. et det. A. Fauvel; R.I.Sc.N.B. 17.479 \ Paratype [red label] \ Trogophloeus; asperatus C, S [framed] \ Neotypus; Trogophloeus; asperatus Coiff. & Sáiz; des. Makranczy, 2015 \ Thinodromus; asperatus (Coiffait & Sáiz); det. Makranczy, 2015" (ISNB). **Paratype** (1, by designation of Coiffait & Sáiz): "Araucanie; sept[entrionale] \ Coll. et det. A. Fauvel; R.I.Sc.N.B. 17.479 \ Paratype [red label] \ Paratypus; Trogophloeus; asperatus Coiff. & S.; ver. Makranczy, 2000 \ Thinodromus; asperatus (Coiffait & Sáiz); det. Makranczy, 2015" (1 ♀, ISNB).

Additional material. ARGENTINA: Rio Negro, 11 km W San Carlos de Bariloche, Cerro Otto [41°08'40"S 71°22'30"W], 14.I.1972, leg. L. Herman (845), leaf litter (1, AMNH); Neuquén, 23 km W San Martin de los Andes, [Puerto] Pucará, Lago Lácar [40°09.5'S 71°38.0'W], 19.I.1972, leg. L. Herman (861), leaf litter in moist areas near stream (29, AMNH), same but (885), 25.I.1972, from leaf litter (1, AMNH).

CHILE: Ñuble prov., 22.7 km ESE Recinto, 1330 m [36°55'S 71°27'W], 10.XII.1982, leg. A. Newton & M. Thayer (ANMT 646), *Nothofagus* forest, Berlese forest litter (FMHD#83-774) (1, FMNH), same but 10.XII.1982–3.I.1983 (FMHD#82-815), window trap (1, FMNH); Ñuble prov., 19.5 km ESE Recinto, Las Trancas, 1250 m [36°54'S 71°28'W], 10.XII.1982–3.I.1983, leg. A. Newton & M. Thayer (ANMT 647), *Nothofagus* forest, window trap [with semi-buried pan] (FMHD#82-818) (1, FMNH), same but 3.I.1983 (FMHD#83-775), Berlese leaf & log litter (2, AMNH); Bio Bio prov., 4 km ESE Alto Bio Bio, Ralco, 37.896°S 71.600°W, 2.XII.2013, leg. T. Struyve, humid litter layer sifted in seepage zone (2 ♂, 2 ♀, 2, coll. Struyve, 1 ♂, 1 ♀, BMNH, 1 ♂, NHMW); Malleco prov., Nahuelbuta, 1100 m [37°45'S 73°05'W], 3.XI.1968, leg. F. Sáiz? (2 ♂, 2, NHMW); Cautín prov., Lago Caburgua [39°11'10"S 71°49'40"W], 4.XII.1977, leg. T. Čekalović (1, AMNH); Cautín prov., Bellavista, N shore Lago Villarrica, 310 m, 39°12'S 72°08"W, 15–30. XII.1982, leg. A. Newton & M. Thayer (ANMT 655), Valdivian rainforest, berlese forest litter (FMHD#82-720 or 703) (1, FMNH), same but window trap (1, FMNH), same but 30.XII.1982 (FMHD#82-848) forest stream, Berlese flood debris (1, AMNH); Cautín prov., Estero Chaulico near Molco [39°18.5'S 72°06.0'W], 25.I.1980, leg. T. Čekalović (4, CNCI), same but 23.II.1983 leg. T. Čekalović (TC-133) (7, CNCI); Cautín prov., Parque Nacional Huerquehue, near "Administracion", 39°10'S 71°44'W, 800 m 22–25.XII.1990, leg. D. Agosti & D. Burckhardt (17a), strongly degraded Valdivian lauriphyllous forest, sifting of vegetational debris (1, MHNG); Valdivia, Enco [39°54.5'S 72°09.0'W], III.1955, leg. L.E. Peña, "underground" (2 ♂, 1, FMNH).

Redescription. Measurements (in mm, n = 10): HW = 0.54 (0.51–0.57); TW = 0.53 (0.50–0.56); PW = 0.57 (0.54–0.60); SW = 0.70 (0.66–0.73); AW = 0.84 (0.81–0.88); HL = 0.36 (0.34–0.38); EL = 0.15 (0.14–0.16); TL = 0.11 (0.10–0.13); PL = 0.47 (0.45–0.50); SL = 0.67 (0.63–0.70); SC = 0.64 (0.60–0.67); FB = 1.53 (1.45–1.61); BL = 3.01 (2.83–3.13). Habitus as in Fig. 6. Lustre and colour. Body moderately lustrous, pronotum and elytra shinier with less microsculptured punctation interspaces (some elevated and less punctate parts of pronotum rather shiny). Head and abdomen blackish dark brown, pronotum reddish medium brown, elytra also but often with thin apical yellowish band, legs, mouthparts and antennae reddish dark brown. Shape and sculpture. Head with prominent supraantennal tubercles and arcuate longitudinal impressions mediad, eyes almost a third longer than temples, latter imperfectly rounded, bulging. Neck delineated with occipital groove, vertex right before neck faintly impressed. Antennae with middle segments about as long as broad, penultimate articles a third broader than long. Pronotum with anterior corners moderately protruding, but acute-angled, sides arcuate anteriorly, evenly convex posteriorly (almost straight); midline slightly impressed anteriorly and elevated in posterior half, disc strongly impressed at the sides of posterior



Figs 28–32: *Thinodromus asperatus*: (28) male sternite VIII; (29) male tergite X; (30) aedeagus, frontal view; (31) median lobe, lateral view; (32) left paramere, lateral view, magnified (1.5 ×). Scale bar = 0.1 mm (32) 0.15 mm (30–31), 0.22 mm (29), 0.24 mm (28).

part, posteriorly bordered by arcuately elevated ridge; at the sides of middle of midline two small elevations. Elytra rather parallel-sided, apically with thin marginal bead, very slightly arched, in outer half with membranous lobe; surface appearing more or less even and convex, slight impressions behind shoulders. Apex of abdominal tergite VII with medially broader palisade fringe. Punctation and microsculpture. Clypeus without apparent microsculpture; punctation sparser than that of vertex, epistomal suture as a slightly incarved line. Head and pronotum with rough (but differently dense) punctation: two elevated bumps on pronotum virtually impunctate, average interspaces slightly less than puncture diameters. No apparent microsculpture. Neck with fine but strong coriaceous microsculpture (transverse cells), less shiny than rest of head. Elytra with punctation of the same roughness, surface uneven (some punctures appearing confluent, some interspaces forming ridges), slight ruggednes only at scutellum. Abdomen with transverse coriaceous microsculpture only on basal ridges) but fading out on more elevated parts, medium fine sparse punctation somewhat meshing in surface unevenness, clearer on shinier parts. Pubescence. Body setation rather short and quite sparse, except stronger bristles near anterior pronotal corner and at 3/5 length of side. Elytral setation swirling, side without conspicuously stronger setae. Abdominal tergites apically with longer, postero-mediad directed setae. Primary and secondary sexual features. Male sternite VIII as in Fig. 28, male tergite X as in Fig. 29. Aedeagus as in Figs 30–32. Spermatheca as in Fig. 158.

Distribution and bionomics. The species is known from both Argentina and Chile, between latitudes 36–42° South. It must be more litter-inhabiting or extracted from upper (wet) soil, was collected from leaf litter in moist areas near stream or seepages. Apart from a few larger series most records are single specimens.

Comment. The holotype is lost. Out of the paratype series, two specimens with A. Fauvel's labels hand-copied by the curator exist and the male is designated as neotype (ICZN Recommendation 75A). The locality "Araucanie septentrionale" was likely between Concepción and the Cordillera de Nahuelbuta (could actually be the latter). The historical (pre-1880) Araucania (the lands of the Moluche) lay between the Itata River and Toltén River.

Thinodromus franzi sp.n.
(Figs 33–37, 71)

Type locality. Chile, Aysén prov., Coyhaique, Reserva forestal, Laguna Venus, approx. 45°31'34"S 72°02'29"W, 750 m.

Type material. Holotype ♂: "S-CHILE, prov. Aisen; Umg. Coyhaique (res. for.); Laguna Venus; 22.X.1968, leg. H. Franz [explanatory label printed in 2002] \ Coyhaique; S-Chile; [on the back:] Sa 159 [original handwritten label]" (NHMW). **Paratypes** (19): Aysén, Coyhaique, Reserva forestal, Laguna Venus, 700–800 m [45°31'34"S 72°02'29"W], 22.X.1968, leg. H. Franz (Sa 158–159), forest *Nothofagus pumilio* and *N. dombeyi*, Bosque Valdivianus, transtional forest, sifted from leaflitter on bank, vegetated bank + trees (1 ♂, 3 ♀, 4, NHMW, 1 ♂, 1 ♀, AMNH, 1 ♂, 1 ♀, BMNH, 1 ♂, 1 ♀, FMNH, 1 ♂, 1 ♀, NMPC, 1 ♂, 1 ♀, coll. Struyve); Llanquihue prov., Lago Llanquihue, 41°13'25.5"S 72°39'23.0"W, 60 m, stream next to road, 16.XII.2014, leg. I. Ribera (12) (1 ♂, coll Assing).

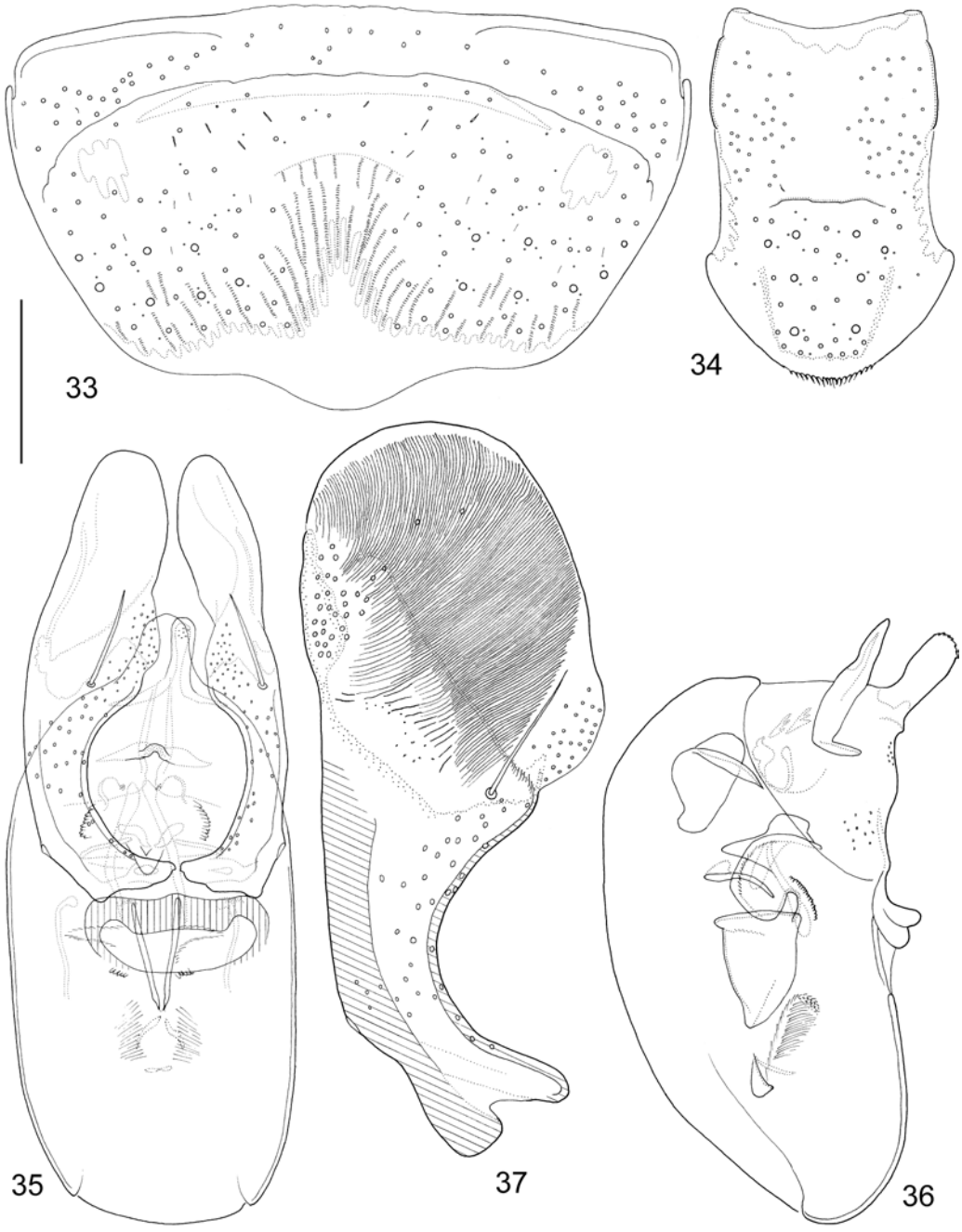
Differential diagnosis. Similar to *Th. signatoides* in having short and spotted elytra, but has a more convex pronotum and less dense elytral punctation.

Description. Measurements (in mm, n = 10): HW = 0.63 (0.60–0.66); TW = 0.60 (0.58–0.63); PW = 0.64 (0.61–0.67); SW = 0.81 (0.77–0.87); AW = 0.96 (0.88–1.00); HL = 0.46 (0.43–0.48); EL = 0.19 (0.18–0.20); TL = 0.12 (0.10–0.13); PL = 0.56 (0.53–0.59); SL = 0.93 (0.87–0.99); SC = 0.90 (0.84–0.96); FB = 1.99 (1.88–2.08); BL = 3.90 (3.53–4.18). Habitus as in Fig. 71. Lustre and colour. Body rather lustrous, punctation interspaces on elytra uneven but lacking apparent microsculpture, most other body parts especially more elevated areas also quite shiny. Blackish dark brown, except small reddish spot on elytra near posterior 3/4 of suture (rarely radiating slightly over larger area). Mouthparts and most of antennae dark brown, legs and basal antennomeres reddish medium to dark brown. Shape and sculpture. Head with prominent supraantennal tubercles and arcuate longitudinal impressions mediad, eyes a third longer than temples, latter perfectly rounded, slightly bulging. Neck delineated with occipital groove, vertex before neck impressed. Antennae with middle segments almost twice as long as broad, penultimate articles slightly elongate. Pronotum with barely noticeable obtuse-angled anterior corners, sides arcuate in anterior half, concave in posterior half; midline elevated in posterior half, strong impressions at its sides, posteriorly bordered by arcuately elevated ridge; besides middle of midline also two gentle impressions; near middle of pronotal side strongly impressed. Elytra slightly dilating posteriorly, apically with thin marginal bead, in inner half straight and oblique, in outer half strongly arched, there with membranous lobe; surface rather even, with shallow oblique impressions from shoulder to middle of disc. Apex of abdominal tergite VII with medially broader palisade fringe. Punctation and microsculpture. Clypeus with fine and shallow coriaceous microsculpture, epistomal suture as a fine impressed line. Head and pronotum with rather fine, medium dense punctation (average interspaces slightly more than puncture diameters, but elevated areas with very sparse and fine punctures), coriaceous microsculpture mostly in depressions, fading on elevated parts, most surfaces shiny. Neck with fine coriaceous microsculpture (slightly transverse cells), less shiny than rest of head. Elytra with slightly stronger and more even but shallow punctation, puncture interspaces about as puncture diameters, slight ruggedness only in two impressions behind scutellum. Abdomen with fading, slightly transverse coriaceous microsculpture, very fine and medium sparse punctation (average interspaces 4–5 × puncture diameters) denser and with stronger microsculpture in antero-lateral corners of tergites. Pubescence. Body setation short and sparse, except stronger bristles near anterior pronotal corner and at 1/3 length of side. Elytral setation directed posteriad but in outer posterior corners turning postero-laterad, side with a few stronger setae (behind shoulder and before mid-length of side). Abdominal tergites apically with longer, postero-mediad directed setae. Primary and secondary sexual features. Male sternite VIII as in Fig. 33, male tergite X as in Fig. 34. Aedeagus as in Figs 35–37.

Distribution and bionomics. The species is known only from Chile, between latitudes 40–46° South. It was sifted from leaflitter at water, most of which were small seepages or streams.

Comment. The knowledge of the here described species is important to correctly identify *Th. signatoides*.

Etymology. The species is named after professor Herbert Franz (1908–2002), who collected the holotype. He was a zoologist specializing in high altitude ecology, geology, soil sciences and teacher who in his spare time made a lot of expeditions. His favourite



Figs 33–37: *Thinodromus franzi* sp.n.: (33) male sternite VIII; (34) male tergite X; (35) aedeagus, frontal view; (36) median lobe, lateral view; (37) left paramere, lateral view, magnified (1.5 ×). Scale bar = 0.1 mm (37) 0.15 mm (35–36), 0.18 mm (33–34).

method was leaf litter samples which gathered a lot of staphylinids along with his particular favourites (e. g. scydmaenines) and these have code numbers on the flipsides of his very superficial printed labels. Most of his notebooks survived and are now digitized in NHMW, from which the complete data can be recovered.

Thinodromus fulgidus (Coiffait & Sáiz, 1968)
(Figs 5, 38–42, 159)

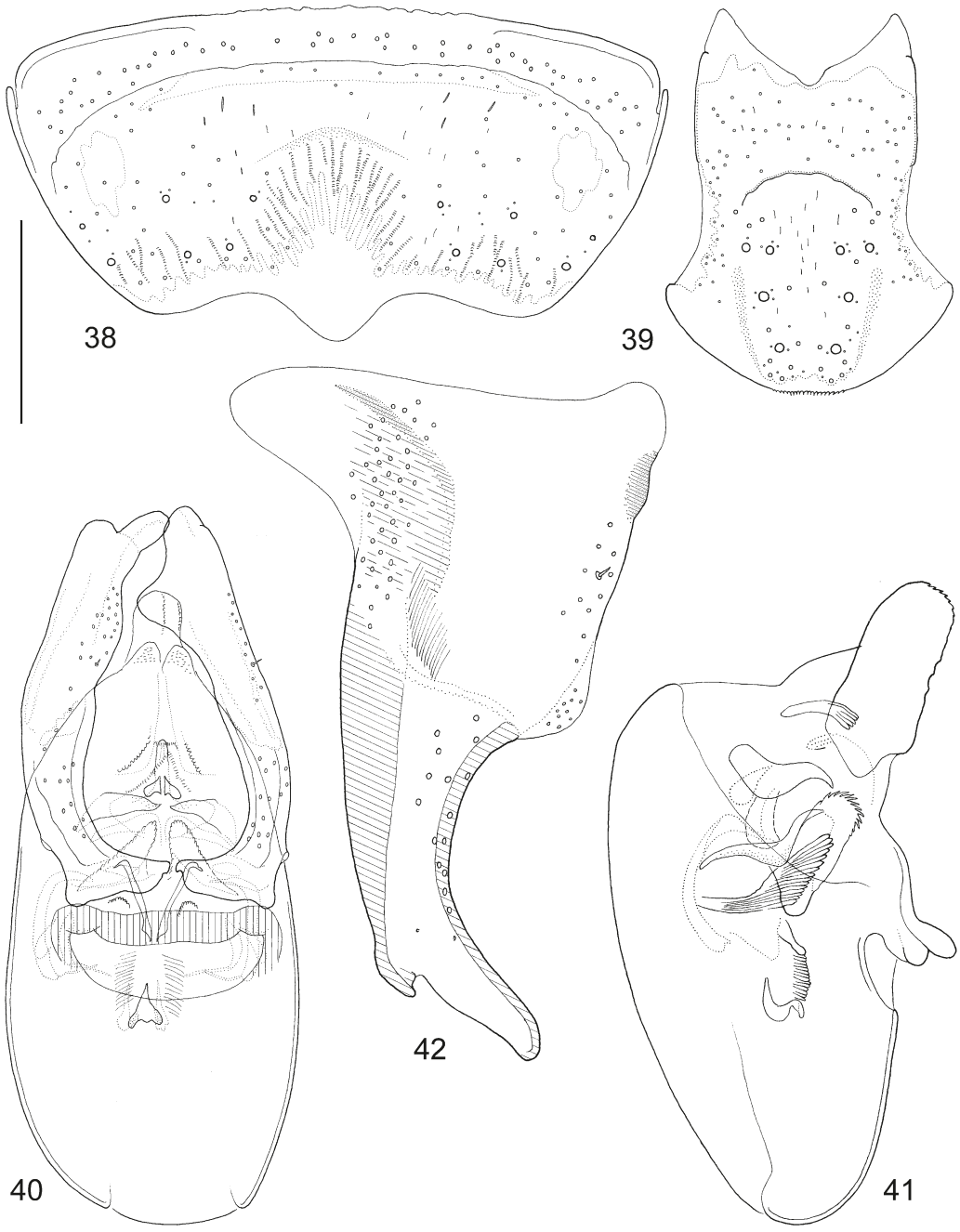
Trogophloeus fulgidus Solier, in litt.
Trogophloeus (*Paracarpalimus*) *fulgidus* Coiffait & Sáiz, 1968: 436.
Carpelimus fulgidus: Herman, 2001b: 1663. (erroneous generic assignment)

Type material. Neotype ♂ (by present designation): "Umg. Embalse de [el]; Yeso 2400–2600 m; [on the back] Sa 200 [along path below the lake, 33°40'30"S 70°05'10"W] \ Chile: Anden b.[ei] Santiago; Cajon del Maipo, 2400–2600 m; Umg.[ebung] Embalse de Yeso; 17.XI.1968, leg. H. Franz [explanatory label printed in 2002] \ Neotypus; Trogophloeus; fulgidus Coiffait & Saiz; des. Makranczy, 2015 \ Thinodromus; fulgidus (Coiffait & Saiz); det. Makranczy, 2015" (NHMW); labels of the lost holotype: "[semi-triangular point with thin green frame] \ [golden rectangle] \ 72. [light green label] \ angulicollis ; Fauvel.; Chile; Scriba. \ luteipes; Sol. \ c.[oll.] Epp[e]lsh.[eim]; Steind.[achner] d.[onavit] \ Trogophloeus; fulgidus; Sol.; (14–19) \ Holotypus [red label] \ fulgidus n.sp.; [19]65; det. Coiff.et Saiz [framed]".

Additional material. ARGENTINA: Catamarca prov., Quebrada Caspinchango [26°42'42"S 65°55'51"W, 2300 m], leg. Vladimir Weiser (turn of 1920–21, III Expedición Arqueológica sponsored by Benjamín Muñiz Barreto) (1, NMPC).

CHILE: Cordillera prov., Cajon del Maipo, Umgebung Embalse el Yeso, 2700 m [33°37.5'S 70°01.0'W], 17.XI.1968, leg. H. Franz (Sa 200a), sifted from grass underneath a dripping (from snowmelt) rock, above the lake (1♂, 4, NHMW); Cordillera prov., Cajon del Maipo, Umgebung Embalse el Yeso, 2600 m [33°40'S 70°05'W], 17.XI.1968, leg. H. Franz (Sa 200b), sifted from moss and grass at waterfall, at the lower end of the lake (91, NHMW, 1 ♂, 1 ♀, HNHM, 1, AMNH, 1, BMNH, 1, MHNG, 1, NMPC, 1, ZMHB, 1, ZMUC); Cordillera prov., San José de Maipo, Río Maipo, ca. 33°40'S 70°05'W, 1000 m, IV.1947, leg. L.E. Peña (1 ♂, 8, FMNH), same but IV.1948 (3, FMNH), same but 1.VII.1947 (1, FMNH, 1, NHMW); Cordillera prov., ca. 20 km E Santiago, road to Farellones [33°22.0'S 70°25.5'W], 1.V.1987, leg. P.D. Perkins, stream debris (2 ♂, FMNH).

Redescription. Measurements (in mm, n = 10): HW = 0.55 (0.53–0.57); TW = 0.53 (0.51–0.55); PW = 0.58 (0.54–0.61); SW = 0.79 (0.76–0.82); AW = 0.85 (0.82–0.90); HL = 0.38 (0.36–0.40); EL = 0.165 (0.16–0.17); TL = 0.12 (0.11–0.125); PL = 0.46 (0.44–0.48); SL = 0.85 (0.82–0.87); SC = 0.82 (0.79–0.84); FB = 1.72 (1.65–1.75); BL = 3.27 (3.10–3.38). Habitus as in Fig. 5. Lustre and colour. Body moderately lustrous, pronotum and elytra shinier with less microsculptured punctation interspaces (some elevated and less punctate parts of pronotum rather shiny). Head and abdomen blackish dark brown, pronotum and elytra medium brown with orangish tint, legs, mouthparts and antennae dark brown. Shape and sculpture. Head with prominent supraantennal tubercles and arcuate longitudinal impressions mediad, eyes slightly longer than temples, latter imperfectly rounded, slightly bulging. Neck delineated with occipital groove, vertex before neck insignificantly impressed. Antennae with middle segments slightly elongate, penultimate articles slightly transverse. Pronotum with anterior angles protruding (acute-angled), arcuate sides insignificantly concave in posterior half; midline slightly impressed anteriorly and elevated in posterior 2/3, disc strongly impressed at the sides of posterior part, posteriorly bordered by arcuately elevated ridge; at the sides of middle of midline two small elevations. Elytra rather parallel-sided, apically with thin marginal bead, moderately arched, in outer 3/5 with membranous lobe; surface slightly uneven, slight impressions from shoulders towards middle of suture plus middle



Figs 38–42: *Thinodromus fulgidus*: (38) male sternite VIII; (39) male tergite X; (40) aedeagus, frontal view; (41) median lobe, lateral view; (42) left paramere, lateral view, magnified (1.5 ×). Scale bar = 0.1 mm (42) 0.15 mm (40–41), 0.17 mm (39), 0.22 mm (38).

of posterior half. Apex of abdominal tergite VII with thin palisade fringe. Punctation and microsculpture. Clypeus without microsculpture, epistomal suture inconspicuous, as shallow scratch. Head and pronotum very strongly and deeply punctate, some punctures slightly confluent giving surface shiny (no microsculpture) but uneven feel; dense coriaceous microsculpture in depressions, shiny on elevated parts. Neck with fine coriaceous microsculpture (slightly transverse cells), less shiny than rest of head. Elytra with slightly stronger and more even punctation, puncture interspaces about half as puncture diameters, some ruggedness in two impressions behind scutellum. Abdomen with slightly transverse coriaceous microsculpture, sparse, fine but distinct punctation, average interspaces 2−3 × puncture diameters. Pubescence. Body setation short and sparse, except a stronger bristle near anterior pronotal corner, plus two others around 2/5 length of side. Elytral setation rather swirly, sides without conspicuous stronger setae. Abdominal tergites apically with longer, postero-mediad directed setae. Primary and secondary sexual features. Male sternite VIII as in Fig. 38, male tergite X as in Fig. 39. Aedeagus as in Figs 40–42. Spermatheca as in Fig. 159.

Distribution and bionomics. This species is known from both Argentina and Chile, between latitudes 26–34° South. The known specimens are from rather high elevations, the arid mountain plateau might be its primary habitat, only a few specimens are collected at streams, coming directly from higher mountains. It was sifted from moss and grass wet from snowmelt or waterfalls, but also found in streambank debris.

Comment. The female holotype was point-mounted but lost off the point. A specimen fragment (without head, etc.) could be found but it was impossible to be sure these parts actually belong to the holotype. From the collection of Herbert Franz (with whom Francisco Sáiz was in correspondence and active exchange of material) a neotype is designated, this series was collected in the same year when the description appeared so could not be seen by its authors.

Thinodromus germaini (Coiffait & Sáiz, 1968)
(Figs 9, 43–47)

Trogophloeus niger Germain, in litt.
Trogophloeus (*Paracarpalimus*) *germaini* Coiffait & Sáiz, 1968: 439.
Trogophloeus (*Trogophloeus*) *nigronitidus* Scheerpeltz, 1972: 83, **syn.n.** (under *Carpelimus* in Herman, 2001b, erroneous assignment)
Carpelimus germaini: Herman, 2001b: 1665. (erroneous generic assignment)

Studied type material. *Trogophloeus germaini* – **Neotype** ♂ (by present designation): "Chile: [Ñuble, Volcán Chillán, Cabañas] Las Cabras [1400 m, 36°54.0'S 71°28.5'W]; 4.II.[19]63 \ coll.; L. Peña \ Trogophloeus; germaini; C,S [framed] \ Neotypus; Trogophloeus; germaini Coiffait & Sáiz; des. Makranczy, 2015 \ Thinodromus; germaini (Coiffait & Sáiz); det. Makranczy, 2015" (FMNH).

Trogophloeus nigronitidus – **Holotype** ♀: "S. Arg. Rio Negro; El Bolson, Topál \ Nr. 86; 27.VII.[19]61 [W slopes of Mt. Piltriquitron, 1260 m, aus Moos und Grasbüscheln im Trockenbereich des *Mulinum* Gebietes] \ Foto [pink label] \ Typus; Trogophloeus; nigronitidus; O. Scheerpeltz [dark red card] \ Holotypus [red label] \ Trogophloeus; nigronitidus; n. sp.; det. Scheerpeltz, 1965 \ Holotypus [in red] 1972; Trogophloeus; nigronitidus; Scheerpeltz [red framed label] \ Thinodromus; germaini (Coiffait & Sáiz); det. Makranczy, 2015" (HNHM); **Paratypes** (3): "S. Arg. Rio Negro; El Bolson, Topál \ Nr. 86; 27.VII.[19]61 \ Cotypus; Trogophloeus; nigronitidus; O. Scheerpeltz [pink card] \ Paratypus [in red] 1972; Trogophloeus; nigronitidus; Scheerpeltz [red framed label] \ Thinodromus; germaini (Coiffait & Sáiz); det. Makranczy, 2015" (1, HNHM); "S. Arg. Rio Negro; El Bolson, Topál \ Nr. 86; 27.VII.[19]61 \ ex coll.; Scheerpeltz [light blue

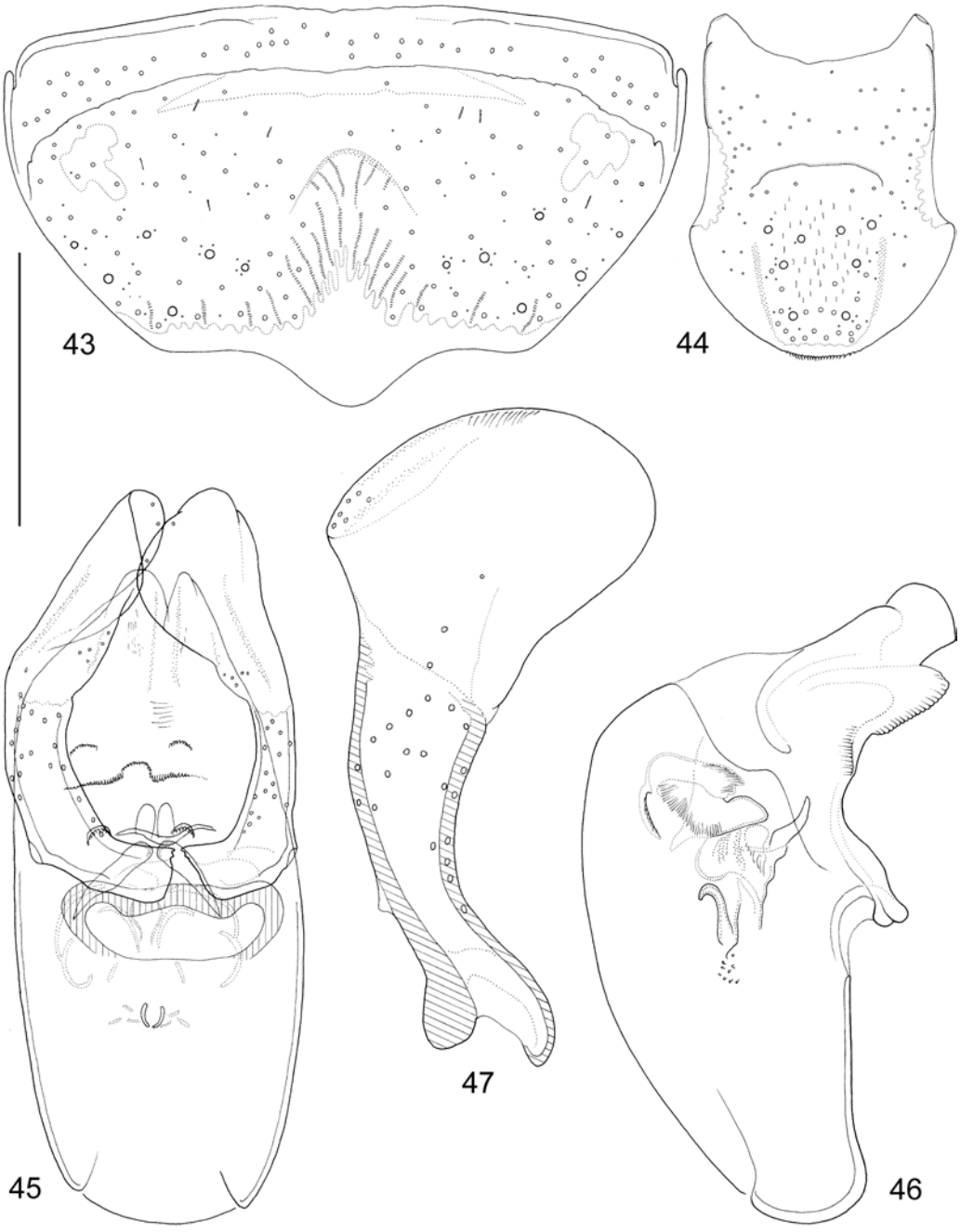
label] \ Cotypus; Trogophloeus; nigronitidus; O. Scheerpeltz [pink card] \ nigronitidus; Scheerp. [light green card] \ Paratypus; Trogophloeus; nigronitidus Scheerp.; ver. Makranczy, 2015 \ Thinodromus; germaini (Coiffait & Sáiz); det. Makranczy, 2015" (1, NHMW); "S. Arg. Rio Negro; El Bolson, Topál \ Nr. 34; 28.VI. [19]61 [W slopes of Mt. Piltriquitron, 1140 m, gesiebt aus Bodenstreu unter *Mulinum spinosum*-Büschen] \ Cotypus; Trogophloeus; nigronitidus; O. Scheerpeltz [pink card] \ Paratypus [in red] 1972; Trogophloeus; nigronitidus; Scheerpeltz [red framed label] \ Thinodromus; germaini (Coiffait & Sáiz); det. Makranczy, 2015" (1 ♀, HNHM).

Additional material. CHILE: Ñuble, Volcán Chillán, Cabañas Las Cabras, ca. 1400 m, 4.II.1961, leg. L. Peña (1♀, FMNH).

Redescription. Measurements (in mm, n = 8): HW = 0.50 (0.46–0.56); TW = 0.50 (0.46–0.55); PW = 0.56 (0.51–0.61); SW = 0.65 (0.59–0.68); AW = 0.74 (0.66–0.83); HL = 0.38 (0.36–0.41); EL = 0.13 (0.12–0.15); TL = 0.12 (0.11–0.14); PL = 0.47 (0.43–0.53); SL = 0.69 (0.65–0.73); SC = 0.66 (0.62–0.70); FB = 1.57 (1.46–1.69); BL = 3.16 (2.89–3.58). Habitus as in Fig. 9. Lustre and colour. Body moderately lustrous, punctate but elytra less densely microsculptured, punctation on pronotum less dense and surface shinier. Head and abdomen blackish dark brown, rest of body dark brown, elytra sometimes little lighter, with reddish tint. Shape and sculpture. Head with prominent supraantennal tubercles and arcuate longitudinal impressions mediad, eyes about as long as temples, latter imperfectly rounded, bulging. Neck delineated with occipital groove, vertex before neck unimpressed. Antennae with middle segments insignificantly longer than broad, penultimate articles slightly transverse. Pronotum with anterior angles moderately protruding (about right-angled), sides gently arcuate, slightly concave before posterior corners; midline elevated in posterior half, shallowly impressed on both sides, posteriorly bordered by slightly elevated, short ridge laterally with "knobs"; besides middle of midline two slight elevations. Elytra rather parallel-sided, apically with thin marginal bead, very slightly arched, with traces of membranous lobe in outer 3/5; surface appearing rather even, shallow impressions from shoulder to anterior third of disc. Apex of abdominal tergite VII with thin palisade fringe. Punctation and microsculpture. Clypeus without microsculpture, no external trace of epistomal suture. Head and pronotum strongly, deeply and densely punctate, less dense on elevations, microsculpture absent even in depressions. Neck with fine coriaceous microsculpture (transverse cells), slightly less shiny than rest of head. Strength of elytral punctation between head (shallower) and pronotum (deeper), more even, puncture interspaces little less than puncture diameters, some ruggedness in two shallow impressions behind scutellum, otherwise no microsculpture. Abdomen with very feeble transverse coriaceous microsculpture, finely and rather sparsely punctate, at elevated parts even more fading, average interspaces at least 3 × puncture diameters. Pubescence. Body setation short and sparse, except stronger bristles near anterior pronotal corner and near mid-length of side. Elytral setation directed posteriad but in outer posterior corners turning postero-laterad, side without conspicuously stronger setae. Abdominal tergites apically with longer, postero-mediad directed setae. Primary and secondary sexual features. Male sternite VIII as in Fig. 43, male tergite X as in Fig. 44. Aedeagus as in Figs 45–47.

Distribution and bionomics. The species is known from both Argentina and Chile, between latitudes 36–42° South. According to the existing bionomical notes it was sifted from litter under *Mulinum spinosum* pads and from moss and grass clumps from dry *Mulinum* area (where moss samples were taken for Tardigrada).

Comment. Further specimens are known to exist without any locality or authentic labels.



Figs 43–47: *Thinodromus germaini*: (43) male sternite VIII; (44) male tergite X; (45) aedeagus, frontal view; (46) median lobe, lateral view; (47) left paramere, lateral view, magnified (1.5 ×). Scale bar = 0.1 mm (47) 0.15 mm (45–46), 0.25 mm (43–44).

Thinodromus grandipennis (BERNHAUER, 1934)
(Figs 48–52, 60)

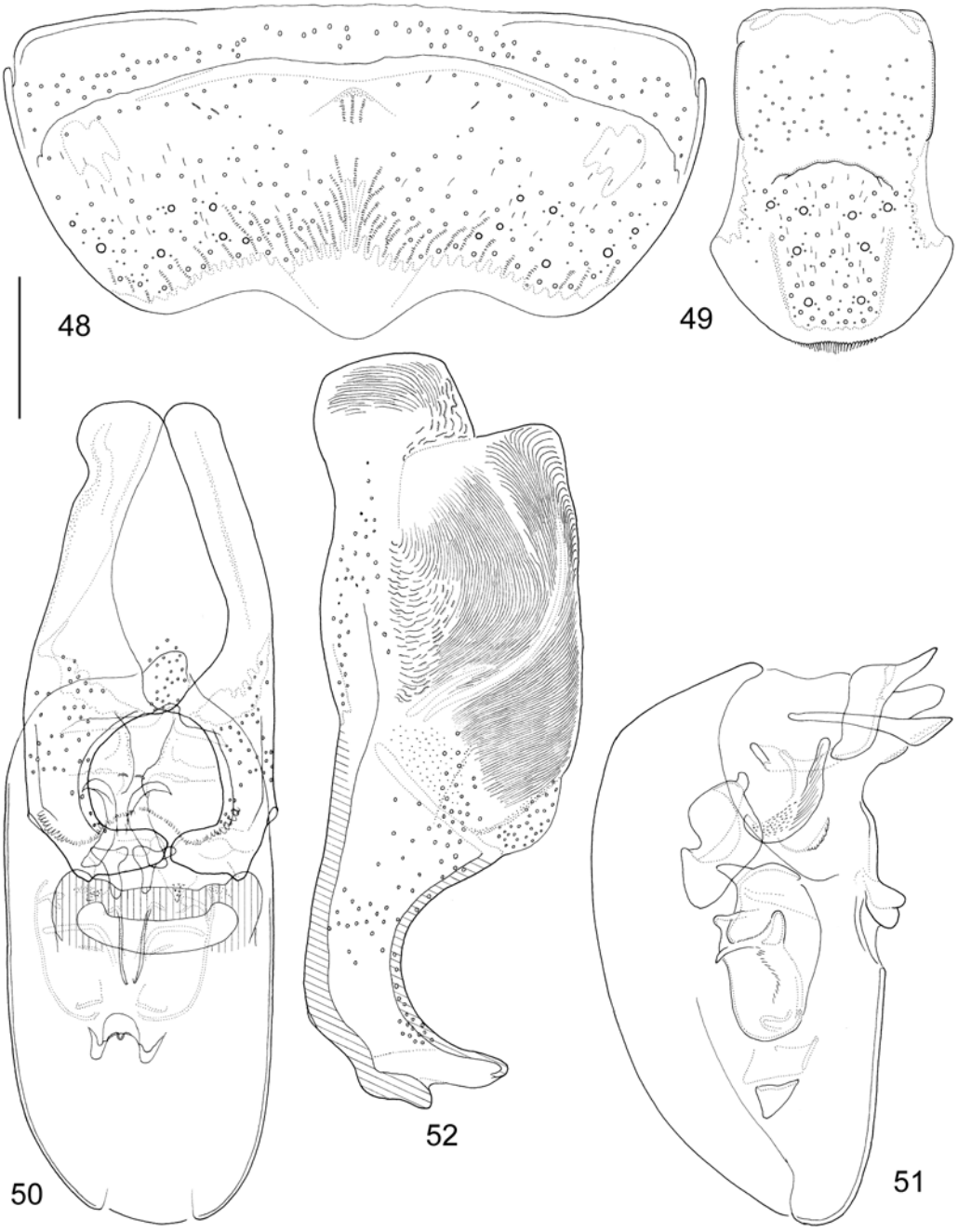
Trogophloeus grandipennis BERNHAUER, 1934: 147.
Trogophloeus (*Paracarpalimus*) *grandipennis*: COIFFAIT & SÁIZ, 1968: 443.
Thinodromus grandipennis: HERMAN, 1970: 387, HERMAN, 2001b: 1768.

Type material. Lectotype ♂ (by present designation): "Chile. Corral [Valdivia prov., 39°55'20"S 73°24'30"W]; don. Thaxter \ grandipennis; Brnh. Cotypus \ Chicago NHMus; M. Bernhauer; Collection \ Lectotypus; Trogophloeus; grandipennis Bernh.; des. Makranczy, 2000 \ Thinodromus; grandipennis (Bernhauer); det. Makranczy, 2000" (FMNH). **Paralectotypes** (2): "No 1901 Rem.; Corral. Chile \ grandipennis; Bernh. Typ. \ grandipennis; Bernh. Typus; Trogophloeus \ Chicago NHMus; M. Bernhauer; Collection \ Paralectotypus; Trogophloeus; grandipennis Bernh.; des. Makranczy, 2000 \ Thinodromus; grandipennis Bernhauer; det. Makranczy, 2000" (1, FMNH); "Co-; Type [yellow-margined disc, curator label] \ Chile.; Corral; Thaxter \ grandipennis; Brnh. Cotypus; Trogophloeus \ Chicago NHMus; M. Bernhauer; Collection \ Brit. Mus.; 1956-709 \ Paralectotypus; Trogophloeus; grandipennis Bernh.; des. Makranczy, 2000 \ Thinodromus; grandipennis Bernhauer; det. Makranczy, 2000" (1, BMNH).

Additional material. ARGENTINA: Neuquén, 23 km W San Martin de los Andes, [Puerto] Pucará, Lago Lacar [40°10.0'S 71°37.5'W], 20.I.1972, leg. L. Herman (868), leaf litter near lake (2 ♂, 2, AMNH, 1, NMPC, 1, NHMW).

CHILE: Malleco prov., Parque Nacional Tolhuaca, Lago Malleco, 890 m [38°13'S 71°49'W], disturbed *Nothofagus* forest, 1.I.1983, leg. A. Newton & M. Thayer (ANMT 651.3), forest stream, Berlese wet leaves and flood debris (FMHD#83-887) (1 ♂, FMNH, 2, AMNH); Malleco prov., Parque Nacional Tolhuaca, sector Laguna Malleco, 900 m [38°13'S 71°49'W], 23–27.I.1996, leg. D. Burckhardt (61a) mixed *Nothofagus* forest, sifting of moss and vegetational debris along creek (1, MHNG);Valdivia prov., Corral, XII.1905, leg. R. Thaxter (2, FMNH); Osorno prov., Parque Nacional Puyehue, 3.1 km E Anticura, Salto los Novios, 415 m [40°39.5'S 72°09.0'W], 19.XII.1982, leg. A. Newton & M. Thayer (ANMT 662.1), river flood debris (FMHD#82-853) (1 ♂, 1 ♀, AMNH, 1 ♂, NHMW); Osorno prov., Puente El Avion, 16.5 km W Puaucho, 40°25'S 73°21'W, 150 m, 11.XI.1994, leg. S. Oygur (1, AMNH); Osorno prov., Aguas Calientes, Río Chanleufu, 40.740°S 72.300°W, 14.XII.2013, leg. T. Struyve, small stream with litter trapped by roots at water (1, coll. Struyve); Llanquihue prov., road EN225 between Puerto Varas and Ensenada, Ponte Rio Pescado, 41°15.216'S 72°47.726'W, 40 m, right bank of Rio Pescado, 6.I.2014, leg. L. Toledano & R. Olivieri (1, MHNG).

Redescription. Measurements (in mm, n = 10): HW = 0.63 (0.60–0.65); TW = 0.59 (0.57–0.62); PW = 0.63 (0.61–0.65); SW = 0.95 (0.91–1.01); AW = 0.96 (0.93–1.02); HL = 0.45 (0.43–0.46); EL = 0.20 (0.19–0.22); TL = 0.12 (0.11–0.14); PL = 0.56 (0.54–0.59); SL = 1.14 (1.08–1.20); SC = 1.11 (1.05–1.17); FB = 2.18 (2.11–2.25); BL = 4.07 (3.94–4.17). Habitus as in Fig. 60. Lustre and colour. Body rather lustrous for the most part, punctation mostly fine and interspaces shiny, at least on more elevated spots, abdomen more strongly microsculptured, duller than forebody. Head, pronotum, abdomen, mouthparts and antennae blackish dark brown, legs reddish medium to dark brown. Elytra broadly dark brown around scutellum and shoulders but remaining half of surface much brighter, reddish. Shape and sculpture. Head with prominent supraantennal tubercles and arcuate longitudinal impressions mediad, eyes slightly longer than temples, latter perfectly rounded, slightly bulging. Neck delineated with occipital groove, vertex before neck slightly impressed. Antennae with middle segments twice as long as broad, penultimate articles a third longer than broad. Pronotum without anterior angles, corners broadly rounded, sides concave in posterior half; midline elevated, interrupted in middle by deep, transversal, U-shaped impression and elevation outside of it, disc strongly, obliquely impressed at the sides of posterior part, posteriorly bordered by arcuately elevated ridge. Elytra very slightly dilating posteriorly, apically with very thin marginal bead, oblique and straight in inner half, arched in outer half, there with membranous



Figs 48–52: *Thinodromus grandipennis*: (48) male sternite VIII; (49) male tergite X; (50) aedeagus, frontal view; (51) median lobe, lateral view; (52) left paramere, lateral view, magnified (1.5 ×). Scale bar = 0.1 mm (52) 0.15 mm (50–51), 0.16 mm (49), 0.17 mm (48).

lobe; surface uneven in anterior half, impressions near shoulders (often longitudinal continuing to posterior half) plus towards middle of suture. Apex of abdominal tergite VII with medially broader palisade fringe. Punctation and microsculpture. Clypeus with fine and dense colliculate microsculpture, epistomal suture as a shinier, slightly incarved line. Head and pronotum punctate but rather unevenly, from rather dense to very loose, puncture sizes also greatly varying (puncture interspaces from half to 4 × of puncture diameters). In impressed parts with strong ruggedness, elevated parts rather shiny and free of microsculpture. Neck with fine coriaceous microsculpture (very transverse cells), less shiny than rest of head. Elytra with much more even punctation, puncture interspaces slightly larger than puncture diameters, traces of coriaceous microsculpture in two impressed spots behind scutellum. Abdomen with very fine and very transverse coriaceous microsculpture, rather sparse, very fine punctation, average interspaces at least 4 × puncture diameters, denser and meshing with microsculpture towards antero-lateral corners of tergites. Pubescence. Body setation short and sparse, except a stronger bristle near anterior pronotal corner and another near mid-length of pronotal side. Elytral setation swirly in middle of anterior half (behind scutellum setae taking a sharp turn in lateral direction), behind that directed posteriad but in outer posterior corners turning postero-laterad, side without conspicuously stronger setae. Abdominal tergites apically with longer, postero-mediad directed setae. Primary and secondary sexual features. Male sternite VIII as in Fig. 48, male tergite X as in Fig. 49. Aedeagus as in Figs 50–52.

Distribution and bionomics. This species is known from both Argentina and Chile, between latitudes 38–41° South. Mostly found in leaflitter and flood debris at streams, rivers and even lake.

Comment. There are obviously more than one species mixed in the type series of this taxon. For an interpretation of this name the only male from the author's collection that agrees the principal description is chosen as lectotype and the identities of further syntypes are not investigated. There is a further possible syntype not conspecific with this taxon (FMNH), the original description refers to a rarely unicolorous dark elytron, this male agreeing this statement. Another pair of specimens from the original collecting event is via Museum of Comparative Zoology and likely obtained from the collector, but these were subsequently mounted and labelled and not considered syntypes.

Thinodromus guttula (BERNHAUER, 1922)

(Figs 1, 53–57)

Trogophloeus guttula FAUVEL, in litt., BERNHAUER, 1922: 2.
Trogophloeus binotatus FAUVEL, in litt., BERNHAUER, 1922: 3, **syn.n.**
Trogophloeus catamarcanus BERNHAUER, 1925: 33, **syn.n.**
Trogophloeus (*Carpalimus*) *guttula*: SCHEERPELTZ, 1933: 1082.
Thinodromus guttula: HERMAN, 1970: 387, HERMAN, 2001b: 1768.

Studied type material. *Trogophloeus guttula* – **Lectotype** ♂ (by present designation): "Yuracaris, Bolivien; A. Fauvel determ. \ guttula Fauv. i.l. ded. Mus.; Hamburg [blue label] \ guttula Brh.; Typus [beige label] \ Chicago NHMus; M. Bernhauer; Collection \ Lectotypus; Trogophloeus; guttula Bernhauer; des. Makranczy, 2000 \ Thinodromus; guttula Bernhauer; det. Makranczy, 2000" (FMNH); **Paralectotypes** (4): "Yuracaris; Bolivie \ Coll. et det. A. Fauvel; Trogophloeus; guttula Fvl.; R.I.Sc.N.B. 17.479 \ Paralectotypus; Trogophloeus; guttula Bernhauer; des. Makranczy, 2000 \ Thinodromus; guttula Bernhauer; det. Makranczy, 2000" (4, ISNB).

Trogophloeus binotatus – **Lectotype** (by present designation): "Yuracaris, Bolivien; A. Fauvel determ. \ binotatus; Fauv. i.l.; Mus. Hamburg [blue label] \ binotatus Bernh.; Cotypus [beige label] \ Chicago NHMus;

M. Bernhauer; Collection \ Lectotypus; Trogophloeus; binotatus Bernhauer; des. Makranczy, 2000 \ Thinodromus; guttula Bernhauer; det. Makranczy, 2000" (FMNH); **Paralectotypes** (4): "Yuracaris; Bolivie \ Coll. et det. A. Fauvel; Trogophloeus; binotatus Brh.; R.I.Sc.N.B. 17.479 \ Paralectotypus; Trogophloeus; binotatus Bernhauer; des. Makranczy, 2000 \ Thinodromus; guttula Bernhauer; det. Makranczy, 2000" (1♂, 1, ISNB); "Loja, Ecuador; Ernesto Witt leg.; ded. 10.X.1899. \ binotatus Fauv.; i.l. ded.; Mus. Hamburg [blue label] \ A. Fauvel; determ. 1904 \ binotatus; Bernh.; Typus [beige label] \ Chicago NHMus; M. Bernhauer; Collection \ Paralectotypus; Trogophloeus; binotatus Bernhauer; des. Makranczy, 2000 \ Thinodromus; guttula Bernhauer; det. Makranczy, 2000" (1, FMNH); "Loja; Ecuador \ binotatus; Fvl. \ R.I.Sc.N.B.; 17.479 Coll. et; det. A. Fauvel \ Paralectotypus; Trogophloeus; binotatus Bernhauer; des. Makranczy, 2000 \ Thinodromus; guttula Bernhauer; det. Makranczy, 2000" (1, ISNB).

Trogophloeus catamarcanus – **Holotype**: "Rep. Argentina; C. Bruch \ Hualfin [27°14.0'S 66°50.5'W]; Catam.[arca prov.] 21.1.923. \ catamarcanus; Bernh.; Typus unic. \ Chicago NHMus; M. Bernhauer; Collection \ Holotypus; Trogophloeus; catamarcanus Bernh.; ver. Makranczy, 2000 \ Thinodromus; guttula Bernhauer; det. Makranczy, 2000" (FMNH).

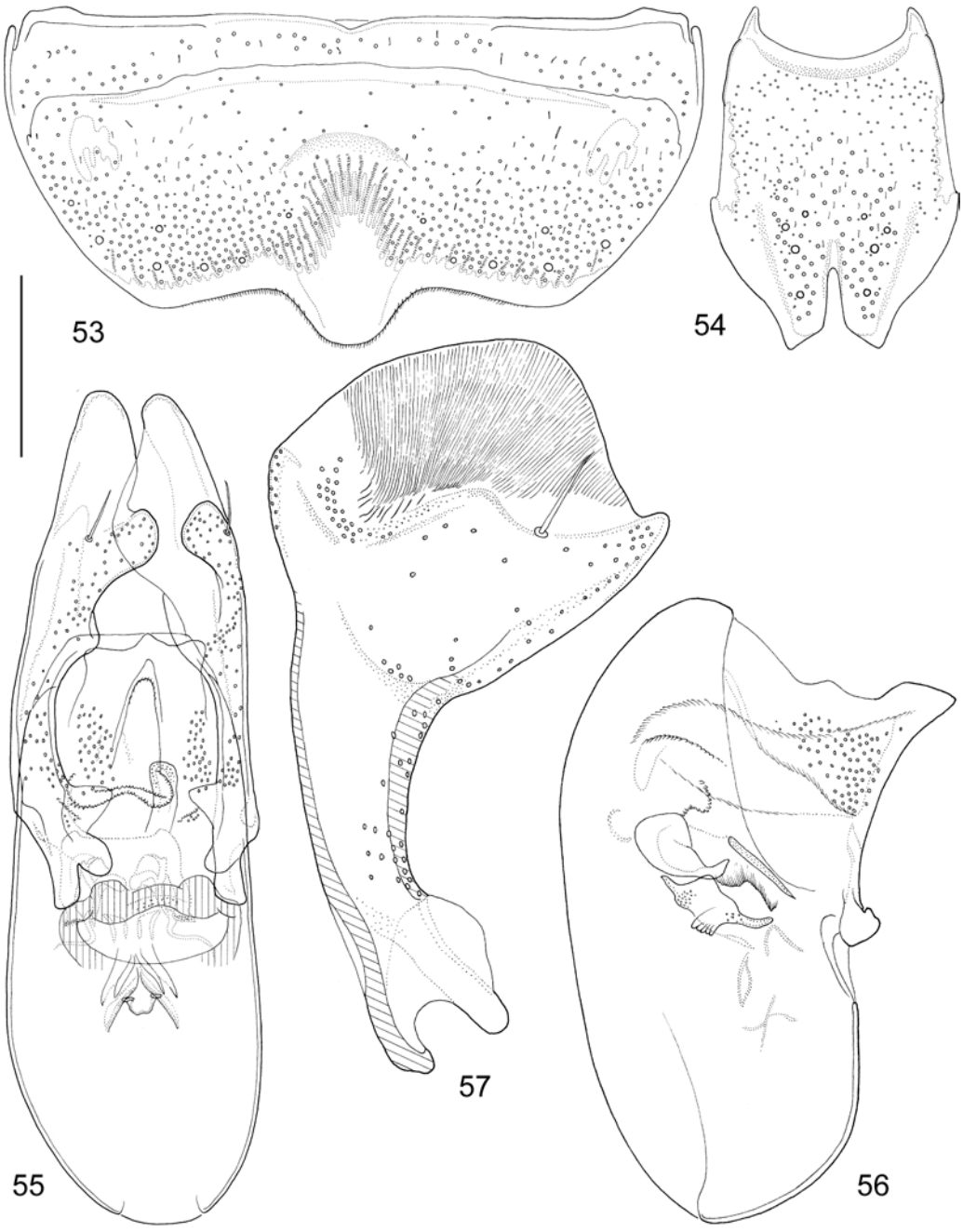
Additional material. ECUADOR: Napo [Amazonica] prov., Santa Clara [01°16.0'S 77°53.5'W], 25.XI.2004, leg. Z. Mracek (1, NHMW).

ARGENTINA: Salta prov., NW Cachi, ruta 40, 2700 m, 24°50'S 66°09'W, 20.II.2010, leg. M. Snižek (1, coll. Schülke, ZMHB); Tucumán prov., above Amaicha del Valle, spring stream at Escuela Manuela Pedraza [26°38.5'S 65°49.5'W], 29.VIII.1998, leg. P. Zwick (2, MHNG); Tucumán prov., [El] Siambón [1300 m, 26°48.0'S 65°21.5'W], VII. 1933, leg. [J. M.] Bosq (4, FMNH).

PERU: Apurimac, 40 mi E Abancay [13°33'20"S 72°32'50"W], 5.III.1951, leg. Ross & Michelbacher (1, CASC), same but Ayacucho, 10 mi N Huanta [12°50'10"S 74°16'20"W], 8.III.1951 (1, CASC).

URUGUAY: Salto, 90 km SW Artigas, 100 m [31°10'S 57°02'W], 27−30.IX.2001, leg. R. Linek (1 ♂, 4, NHMW, 1 ♂, BMNH).

Redescription. Measurements (in mm, n = 10): HW = 0.74 (0.71–0.77); TW = 0.70 (0.66–0.73); PW = 0.75 (0.68–0.80); SW = 1.00 (0.95–1.05); AW = 1.01 (0.92–1.05); HL = 0.45 (0.43–0.47); EL = 0.26 (0.25–0.28); TL = 0.10 (0.08–0.11); PL = 0.56 (0.53–0.58); SL = 1.08 (0.97–1.15); SC = 1.03 (0.92–1.10); FB = 2.20 (2.07–2.27); BL = 3.77 (3.37–3.96). Habitus as in Fig. 1. Lustre and colour. Weakly lustrous for dense (albeit mostly very short) setation, and very fine and dense punctation and microsculpture. Body blackish dark brown except elytra dark brown with orangish spot at 2/3 suture length and 1/3 elytron width from suture. Legs, antennae and mouthparts mostly dark brown. Shape and sculpture. Head with weakly developed supraantennal tubercles and shallow, indistinct impressions mediad, eyes at least twice as long as temples, latter perfectly rounded, bulging. Neck delineated with occipital groove, before neck with shallow longitudinal impression. Antennae with middle segments incrassate and about twice as long as broad, last three articles slightly bulkier than preceding, penultimate a third longer than broad. Pronotum with anterior corners barely marked and very obtuse-angled, sides rounded in anterior third, almost truncate in posterior 2/3, slightly concave before posterior corners; midline elevated in posterior half, disc strongly impressed at the sides of posterior part, posteriorly bordered by arcuately elevated ridge; at the sides of middle of midline two slightly oblique elevations, between them shallowly impressed. Elytra very slightly dilating posteriorly, apically with very thin marginal bead, oblique and straight in inner half strongly arched in outer half, with inconspicuous membranous lobe; surface slightly uneven with shallow impressions from shoulder to middle of disc. Apex of abdominal tergite VII with medially broader palisade fringe. Punctation and microsculpture. Head and pronotum with extremely fine and dense punctation combined with microsculpture making surface almost entirely dull, epistomal suture as a shiny strip, neck not differing in shininess. Elytra with the same extremely fine and dense punctation as ground sculpture but



Figs 53–57: *Thinodromus guttula*: (53) male sternite VIII; (54) male tergite X; (55) aedeagus, frontal view; (56) median lobe, lateral view; (57) left paramere, lateral view, magnified (1.5 ×). Scale bar = 0.1 mm (57) 0.15 mm (55–56), 0.2 mm (53), 0.22 mm (54).

Figs 58–59: (58) *Thinodromus luteipes* and (59) *Th. newtonorum* sp.n., habitus.

Figs 60–61: (60) *Thinodromus grandipennis* and (61) *Th. kadari* sp.n., habitus.

Figs 62–63: (62) *Thinodromus janinae* sp.n. and (63) *Th. saizi* sp.n., habitus.

Figs 64–65: (64) *Thinodromus araucanus* and (65) *Th. magnipennis*, habitus.

Figs 66–67: (66) *Thinodromus tegens* sp.n. and (67) *Th. signatus*, habitus.

Figs 68–69: (68) *Thinodromus schwabei* and (69) *Th. toroi* sp.n., habitus.

Figs 70–71: (70) *Thinodromus signatoides* and (71) *Th. franzi* sp.n., habitus.

on top with another shallow punctation pattern, about 3 × larger punctures at about 2−3 × distance of their diameters; sculpture same in two very shallow longitudinal impressions behind scutellum. Abdomen also with extremely fine and dense punctation, interrupted by bases of sparse setae, appearing as tiny knoblike elevations especially on posterior edge of tergites. Pubescence. Body setation extremely short and dense, except a stronger bristle near anterior pronotal corner plus a very strong and a much lighter near the 1/3 length of side. Elytral setation extremely fine, mostly very dense and short, predominantly directed posteriad or postero-laterad, side with a few stronger setae. Abdomen with longer, straight setae on apices of tergites. Primary and secondary sexual features. Male sternite VIII as in Fig. 53, male tergite X as in Fig. 54. Aedeagus as in Figs 55–57.

Distribution and bionomics. The types of the two nominal taxa described together are from the Amazonian side of the Andes from Ecuador to Bolivia but the species is also known from N-Argentina to Uruguay, between latitudes 24–32° South. Very little bionomical information is available besides the species probably living on banks of streams and rivers.

Comment. This species represents a different lineage (and is so far its only known species), hence its distributional pattern differs from the other species treated here.

Thinodromus impressipennis (FAIRMAIRE & GERMAIN, 1861)
(Figs 2, 72–76, 160)

Trogophloeus impressipennis FAIRMAIRE & GERMAIN, 1861: 448; FAUVEL, 1867: 30 [= FAUVEL, 1868: 35].
Trogophloeus (*Trogophloeus*) *impressipennis*: BERNHAUER & SCHUBERT, 1911: 100.
Trogophloeus (*Paracarpalimus*) *impressipennis*: COIFFAIT & SÁIZ, 1968: 442.
Trogophloeus (*Trogophloeus*) *iniquipennis* SCHEERPELTZ, 1972: 71, **syn.n.** (under *Carpelimus* in HERMAN, 2001b, erroneous assignment)
Thinodromus impressipennis: HERMAN, 1970: 387; HERMAN, 2001b: 1769.

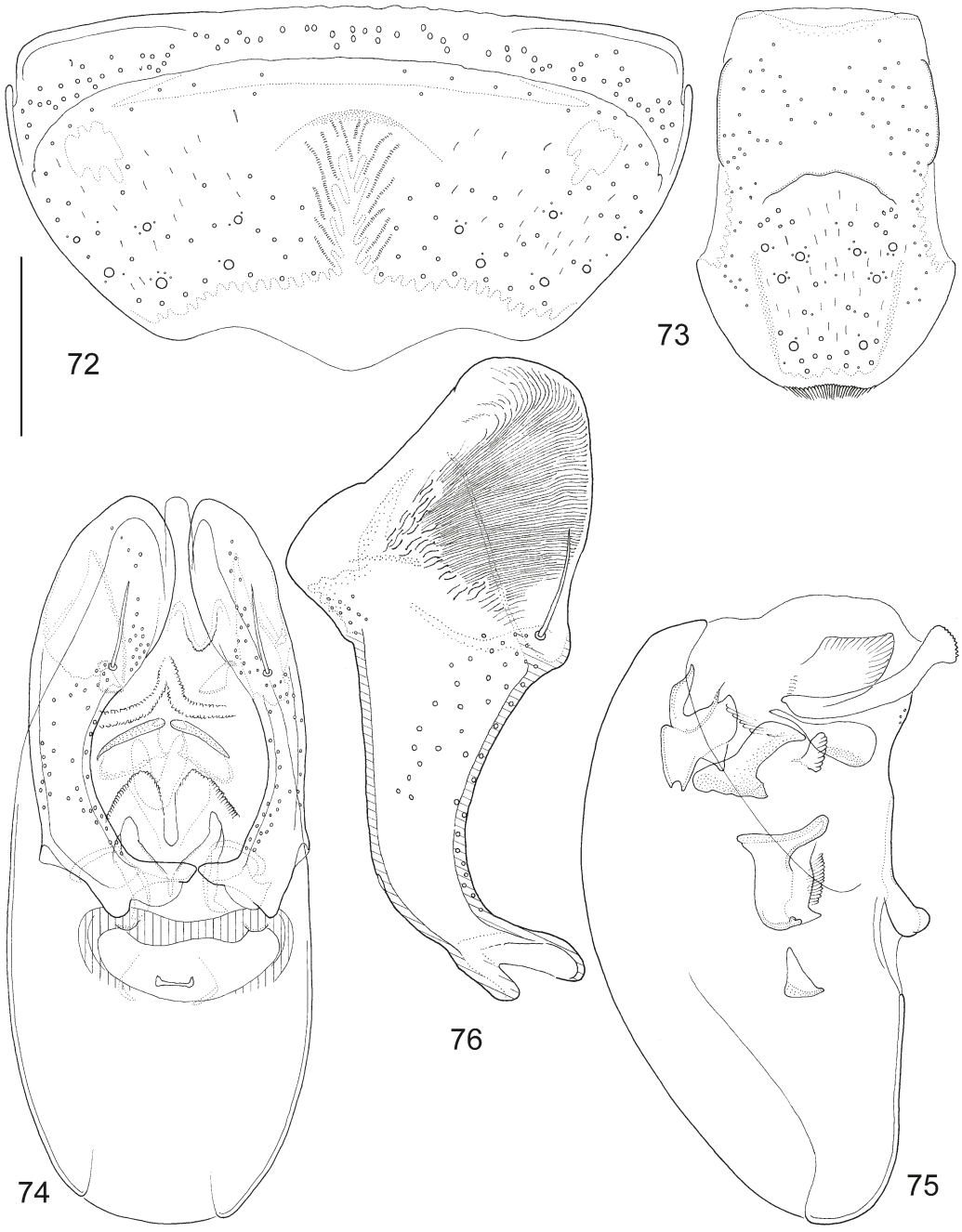
Studied type material. *Trogophloeus impressipennis* – **Lectotype** ♂ (by present designation): "262 [Quillota, accroché sous les pierres dans les ruisseaux] \ Trogophloeus; impressipen ["nis" cut off] \ Coll. et det. A. Fauvel; R.I.Sc.N.B. 17.479 \ Lectotypus; Trogophloeus; impressipennis F. & G.; des. Makranczy, 2000 / Thinodromus; impressipennis Fairm. & G.; det. Makranczy, 2000" (ISNB); **Paralectotypes** (5)**:** "262 \ Trogophloeus; impressipen \ Coll. et det. A. Fauvel; R.I.Sc.N.B. 17.479 \ Paralectotypus; Trogophloeus; impressipennis F. & G.; des. Makranczy, 2000 / Thinodromus; impressipennis Fairm. & G.; det. Makranczy, 2000" (2, ISNB plus 1 without head and pronotum); "Syn-; type [light blue margined disc, curator label] \ 31420 \ Type \ Trogophloeus; impressipennis; mihi \ Germain \ Chili \ Fry Coll.; 1905-100. \ Trogophloeus; impressipennis; P.M. Hammond; det. 1973 F. & G.; Syntype \ Paralectotypus; Trogophloeus; impressipennis F. & G.; des. Makranczy, 2000 \ Thinodromus; impressipennis Fairm. & G.; det. Makranczy, 2000" (2, BMNH).

Trogophloeus iniquipennis – **Holotype** ♂: "S.Arg.[entina] Rio Negro; El Bolson, Topál \ Nr. 51; 6.II.[19]61 [langst dem Arroyo Negro, 350 m, gesiebt aus Bodenstreu von *Myrceugenia exsupca*] \ Foto [pink card] \ Typus; Trogophloeus; iniquipennis; O Scheerpeltz [dark red card] \ Holotypus [red label] \ Trogophloeus; iniquipennis; n. sp.; det. Scheerpeltz, 1965 \ Holotypus [in red] 1972; Trogophloeus; iniquipennis; Scheerpeltz [red framed label] \ Thinodromus; impressipennis (F. & G.); det. Makranczy, 2015" (HNHM).

Additional material. ARGENTINA: Neuquén, 23 km W San Martin de los Andes, [Puerto] Pucará, Lago Lácar [40°09.5'S 71°38.0'W], 19.I.1972, leg. L. Herman (860), leaf litter in moist areas near stream (1 ♂, AMNH), same but (861) (1 ♂, AMNH); Neuquén, 23 km W San Martin de los Andes, [Puerto] Pucará, Lago Lacar [40°10.0'S 71°37.5'W], 20.I.1972, leg. L. Herman (868), leaf litter near lake (1, AMNH); Neuquén, 4 km W [Puerto] Pucará, 900 m [40°09'20"S 71°39'50"W], 21.I.1972, leg. L. Herman (869), leaf litter in arroyo near water (1 ♂, AMNH); Rio Negro, 20 km E San Carlos de Bariloche, Rio Ñirihuau [41°09'50"S 71°07'50"W], 15.I.1972, leg. L. Herman (853), leaf litter in river bed (1, AMNH); Chubut, El Bolsón, Lago Puelo [42°09'35"S 71°35'40"W], 250 m, 23.X.1981, leg. E. Nielsen & O. Karsholt (30) (1, ZMUC).

CHILE: Quillota prov., 4 km E Quebrada Alvarado, 500 m [33°03'S 71°03'W], 5.I.1983, leg. A. Newton & M. Thayer (ANMT 668.2), gallery forest along stream, stream edge debris, especially among wet leaves (1 ♂, FMNH, 9, AMNH, 1, NHMW); Valparaiso prov., Cerro La Campana, sector "Primera aguada", 480 m [32°58'50"S 71°07'50"W] 30.XI.2003, leg. P.M. Giachino (3, coll. Assing, 1, MHNG); Valparaiso prov., Colliquay, cabana La Retuca [33°08'10"S 71°20'40"W], 5.XI.1963, leg. G.F. Edmunds (1 ♂, 2, CASC); Valparaiso prov., Quillota, [Cerro] La Campana [= Bell Mtn., 32°58'09"S 71°07'36"W], 23.X.1968, J. Solervicens (1♂, 4, NHMW); Valparaiso, Bell Mtn. [Cerro La Campana], S-slope, 3000 ft [32°58'09"S 71°07'36"W], 17.XII.1950, leg. E.S. Ross & A.E. Michelbacher (4, CASC); Santiago, Laguna de Acúleo, Quebrada El Árbol [33°51.5'S 70°53.0'W], X.1964, leg. F. Sáiz? (2, NHMW); Chacabuco prov., 4.4 km W Til Til, 700 m [33°04.302'S 70°58.131'W, 750 m], 5.I.1983, subtropical xeric shrub, stream (1, FMNH); Colchagua prov., Puente Negro, Río Tinguiririca, 34.677°S 70.871°W, 1.XII.2013, leg. T. Struyve, large river with huge gravel banks, leafpacks sifted (4, coll. Struyve); Curicó prov., Los Queñes, Río Teno, 35°00.0'S 70°49.5"W, 650 m, 6.VII.1967, leg. F. Saiz?, Borde arroyo (1, NHMW); Bio Bio prov., 4 km ESE Alto Bio Bio, Ralco, 37.896°S 71.600°W, 2.XII.2013, leg. T. Struyve, humid litter layer sifted in seepage zone (1, coll. Struyve); Malleco prov., Puente Las Toscas, 21 km ESE Victoria, 480 m [38°17'S 72°09'W], 14.XII.1982, leg. A. Newton & M. Thayer (ANMT 651.1), disturbed area, small river, flood debris (1 ♂, FMNH, 3, AMNH); Malleco prov., Parque Nacional Tolhuaca, Lago Malleco, 890 m [38°13'S 71°49'W], disturbed *Nothofagus* forest, 1.I.1983, leg. A. Newton & M. Thayer (ANMT 651.3), wet leaves and flood debris, forest stream (FMHD#83-887) (1, AMNH, 1, ZMHB); Malleco prov., Parque Nac. Contulmo, 10 km W Purén, 240 m [38°01'S 73°11'W], 12.XII.1982, leg. A. Newton & M. Thayer (ANMT 648.3), mixed hardwood forest w/*Chusquea*, wet leaves & flood debris, forest stream (2, AMNH, 1, NMPC); Cautín prov., Bellavista, N shore of Lago Villarrica, 310 m [39°12'S 72°08'W], 30.XII.1982, leg. A. Newton & M. Thayer (ANMT 655), Valdivian rainforest, forest stream, Berlese flood debris (FMHD#82-848) (1, AMNH, 1, MHNG); Osorno prov., Aguas Calientes, Río Chanleufu, 40.740°S 72.300°W, 14.XII.2013, leg. T. Struyve, small stream with litter trapped by roots at water (2, coll. Struyve); Llanquihue prov., Lago Llanquihue, 41°13'25.5"S 72°39'23.0"W, 60 m, stream next to road, 16.XII.2014, leg. I. Ribera (12) (3, coll. Assing).

Redescription. Measurements (in mm, n = 10): HW = 0.62 (0.58–0.65); TW = 0.57 (0.54–0.59); PW = 0.62 (0.59–0.65); SW = 0.86 (0.81–0.92); AW = 0.96 (0.90–1.00); HL = 0.41 (0.39–0.43); EL = 0.20 (0.19–0.22); TL = 0.11 (0.10–0.12); PL = 0.52 (0.49–0.55); SL = 0.96 (0.89–1.02); SC = 0.93 (0.86–0.99); FB = 1.95 (1.80–2.02); BL = 3.84 (3.42–4.06). Habitus as in Fig. 2. Lustre and colour. Body weakly lustrous, punctate and microsculptured, only more elevated parts of uneven elytral surface and "knobs" on pronotum shinier. Head and abdomen blackish dark brown, pronotum, elytra, legs, mouthparts and antennae dark brown with occasional reddish tint; basal antennomeres sometimes little lighter. Shape and sculpture. Head with prominent supraantennal tubercles and arcuate longitudinal impressions mediad, eyes a third longer than temples, latter perfectly rounded, bulging. Neck delineated with occipital groove, vertex before neck impressed. Antennae with middle segments almost a half longer than broad, penultimate articles about as long as broad. Pronotum with anterior corners protruding, small but acute, sides with a slight angle at 1/3 length, slightly concave posteriorly; midline elevated, more strongly posteriorly than in middle, disc strongly impressed at the sides of posterior part, posteriorly bordered by arcuately elevated ridge; besides middle of midline also two gentle, oblique impressions; before middle of pronotal side rather strongly impressed. Elytra rather parallel-sided, apically with thin marginal bead, moderately arched, at outer half with membranous lobe; surface appearing uneven with major impressions from shoulder to middle of disc, posterior disc slightly impressed in inner half. Apex of abdominal tergite VII with medially broader palisade fringe. Punctation and microsculpture. Clypeus with fine and shallow coriaceous microsculpture, epistomal suture as a shiny stripe. Head and pronotum with medium fine, rather dense punctation (average interspaces about half as puncture diameters), traces of coriaceous microsculpture mostly in depressions, shinier on elevated parts.



Figs 72–76: *Thinodromus impressipennis*: (72) male sternite VIII; (73) male tergite X; (74) aedeagus, frontal view; (75) median lobe, lateral view; (76) left paramere, lateral view, magnified (1.5 ×). Scale bar = 0.1 mm (76) 0.15 mm (74–75), 0.17 mm (73), 0.19 mm (72).

Neck with fine coriaceous microsculpture (transverse cells), less shiny than rest of head. Elytra with slightly stronger but less dense punctation, puncture interspaces less than puncture diameters, slight traces of coriaceous microsculpture, some ruggedness only in two impressions behind scutellum. Abdomen with slightly transverse coriaceous microsculpture, denser in antero-lateral corners, fading (shiny) on elevated/hind parts, medium sparse, rather fine punctation, average interspaces 2−3 × puncture diameters. Pubescence. Body setation short and moderately dense, except a stronger bristle near anterior pronotal corner plus two further setae at the angle and mid-length of pronotal side. Elytral setation mostly directed posteriad or postero-laterad but in posterior half of disc direction undulate, side with a few stronger but inconspicuous setae. Abdominal tergites apically with longer, postero-mediad directed setae. Primary and secondary sexual features. Male sternite VIII as in Fig. 72, male tergite X as in Fig. 73. Aedeagus as in Figs 74–76. Spermatheca as in Fig. 160.

Distribution and bionomics. This species is known from both Argentina and Chile, between latitudes 33–43° South. It is rather common in a variety of hardwood forests even found in subtropical xeric shrubs. Specimens were most frequently encountered in wet leaflitter and flood debris at streambanks or in leafpacks accumulating on gravel heaps of rivers, but it was also collected from leaflitter around seepages or streamlets on forested slopes.

Comment. This species is rather variable and if the tubercles at the widest point of the pronotum are not clearly visible it can be recognized by the obliquely wrinkled appearance of the elytra.

Thinodromus janinae sp.n.
(Figs 62, 77–81)

Type locality. Chile, Biobio prov., 4.5 km N Volcán Antuco, Laguna del Laja, 37°22.217'S 71°20.753'W, 1400 m.

Type material. Holotype ♂: "CHILE: Región del Bíobío, 4.5 km N Volcán Antuco, Laguna del Laja, 37°22.217'S, 71°20.753'W, 1400 m, 22–23.I.2005, leg. Svatopluk Bílý" (ZMUC). **Paratype** (1): same data as holotype (1 ♀, ZMUC).

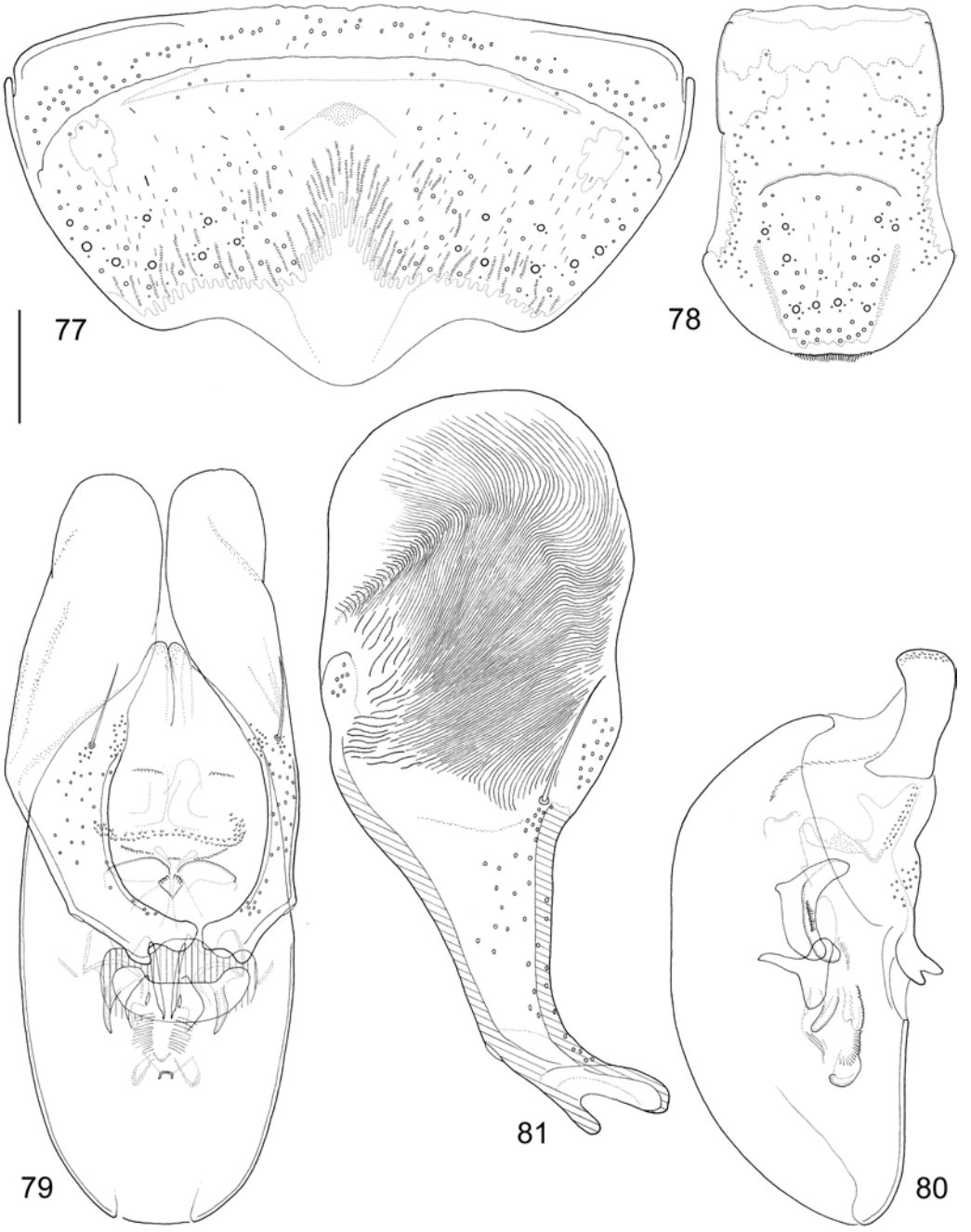
Differential diagnosis. Similar to *Th. saizi* sp.n. in colouration but larger, also to the similar sized *Th. magnipennis* but lighter coloured and with much looser pronotal punctation.

Description. Measurements (in mm, n = 2): HW = 0.76 (0.75–0.77); TW = 0.73 (0.72–0.74); PW = 0.79 (0.79–0.80); SW = 1.13 (1.13–1.13); AW = 1.28 (1.27–1.28); HL = 0.53 (0.52–0.53); EL = 0.23 (0.22–0.24); TL = 0.16 (0.15–0.16); PL = 0.70 (0.70–0.70); SL = 1.32 (1.31–1.33); SC = 1.28 (1.27–1.29); FB = 2.59 (2.57–2.60); BL = 4.70 (4.70–4.70). Habitus as in Fig. 62. Lustre and colour. Body quite lustrous, for fine punctation and generally weak microsculpture, light coloured elytra reducing effect of shinyness. Blackish dark brown but elytral disc yellow, only a thin posterior stripe black plus scutellar area broadly as a reverse triangle from middle of suture to shoulders; mouthparts and antennae blackish dark brown, legs yellow but slightly infuscate, especially apices of femora and around middle of tibiae. Shape and sculpture. Head with well developed supraantennal tubercles and slightly oblique longitudinal impressions mediad (with large

setigerous pores in middle), eyes at least a third longer than temples, latter somewhat more narrowly rounded in middle than anteriorly and before neck. Neck delineated with occipital groove, vertex before neck slightly elevated in a reverse (obtuse-angled) V-shape. Antennae with middle segments almost twice as long as broad, penultimate articles just slightly longer than broad. Pronotum with anterior corners barely noticeable, corners rounded, sides arcuate in anterior half, concave in posterior half; middle of disc slightly impressed anteriorly and elevated behind and around, disc slightly impressed at the sides of posterior part (and more strongly microsculptured there), posteriorly with anchor-shaped ridge, impressed in corners of anchor; arms of anchor somewhat shinier knob-like elevations. Elytral sides very gently arcuate and insignificantly broadening, apically with thin marginal bead, in inner half almost straight and oblique, in outer half more arched, there with very thin membranous lobe; surface rather even and almost completely convex, only extremely slightly impressed in anterior halves, but deeply impressed behind scutellum. Apex of abdominal tergite VII with thin but medially broader palisade fringe. Punctation and microsculpture. Clypeus with fine-meshed (among strong but scattered punctation), dense coriaceous microsculpture, making surface somewhat dull; epistomal suture strongly impressed laterally but seamingly interrupted (shallow) in middle. Head and pronotum with moderately strong punctation, fine coriaceous microsculpture very indistinct on head, more obvious on pronotum, elevated parts with somewhat loosened punctation and therefore shinier; in depressions stronger coriaceous-colliculate microsculpture, also strong coriaceous microsculpture towards middle of pronotal side. Neck with fine but strong coriaceous microsculpture (transverse cells), with much less lustre as rest of head. Elytra with slightly stronger and more even punctation, puncture interspaces a little larger than puncture diameters, some ruggedness behind scutellum with two slight impressions. Abdomen with fine, slightly transverse coriaceous microsculpture (larger celled behind basal ridge), very fine and scattered punctation, average interspaces more than 10 × puncture diameters. Pubescence. Body setation short and sparse, except stronger bristles near anterior pronotal corner and near 3/5 length of side. Elytral setation directed posteriad but in outer posterior corners turning postero-laterad, side with a few stronger setae (more erect but otherwise inconspicuous). Abdominal tergites apically with longer, postero-mediad directed setae. Primary and secondary sexual features. Male sternite VIII as in Fig. 77, male tergite X as in Fig. 78. Aedeagus as in Figs 79–81.

Distribution and bionomics. This species is known from a single locality in Chile, between latitudes 37–38° South. The types were collected near the Refuge of the University of Concepción, infamous for the tragedy that happened there just a few months later, on 18.V.2005 when 45 Chilean soldiers froze to death in a whiteout (-35°C). No specific notes are present about the habitat.

Etymology. The species is named after Janina Lisa Kypke (University of Copenhagen, Denmark) who was finishing her PhD at the University of Copenhagen (Denmark) at the time of my visit there and helped with arrangement of the Staphylinidae Meeting in Copenhagen (2018) and assisted with photos of both larvae and fossil specimens. She was literally sitting at my back when I found this species in the collection immediately recognizing it as being new.



Figs 77–81: *Thinodromus janinae* sp.n.: (77) male sternite VIII; (78) male tergite X; (79) aedeagus, frontal view; (80) median lobe, lateral view; (81) left paramere, lateral view, magnified (1.5 ×). Scale bar = 0.1 mm (81) 0.15 mm (79–80), 0.16 mm (78), 0.17 mm (77).

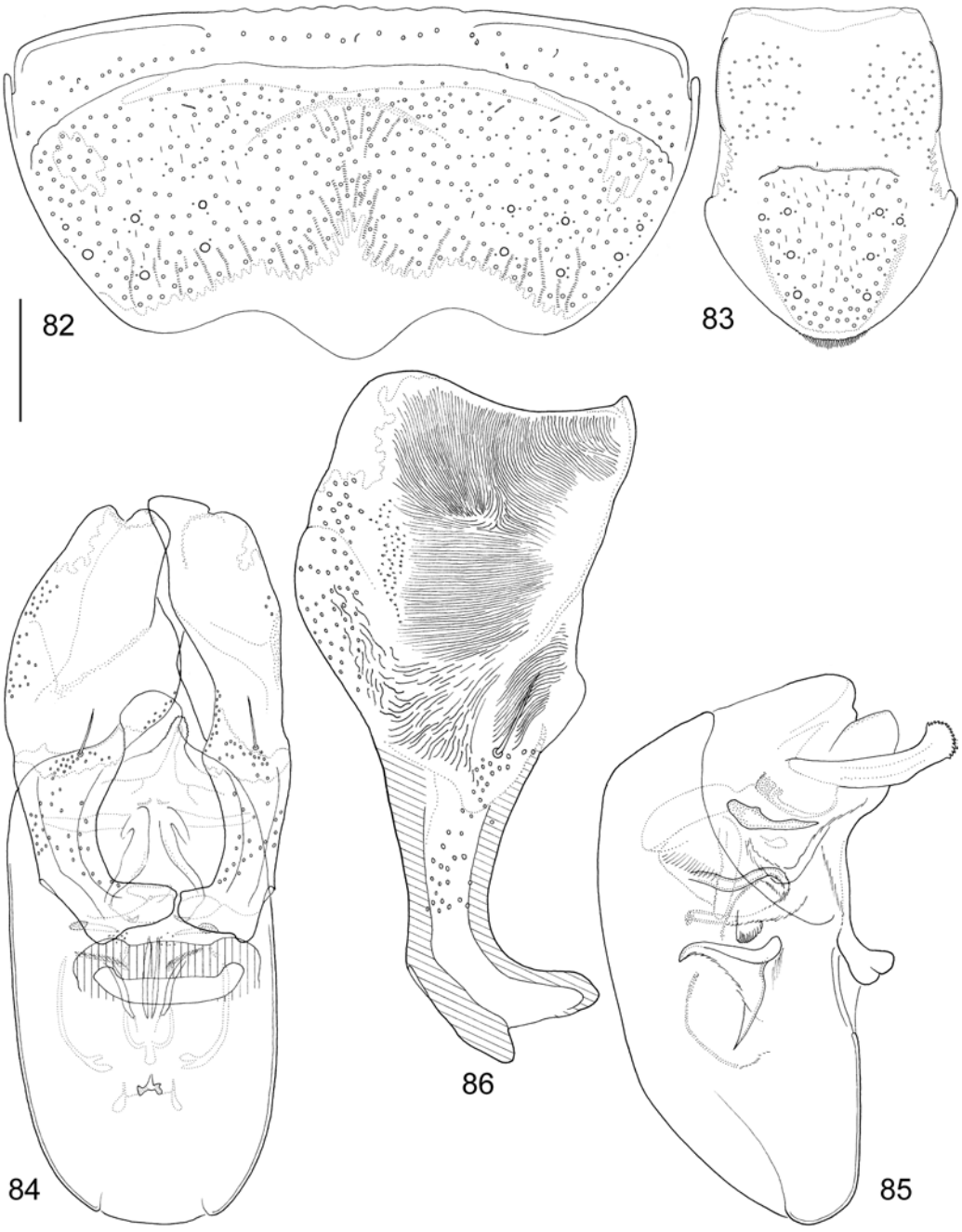
Thinodromus kadari sp.n.
(Figs 61, 82–86)

Type locality. Chile, Chiloe prov., Pindapulli, approx. 42°17.5'S 73°42.0'W, 100 m.

Type material. **Holotype** ♂: "CHILE: Chiloe Is., Pindipujii [Pindapulli], 25-II-1962, B. Malkin leg. \ in algaceous pond of; stream with generally; stony bottom" (FMNH). **Paratypes** (2): ARGENTINA: Neuquén, Lanín NP, Tromen Lake and Turbio Stream at its confluence, 39°34.183'S 71°26.451'W, 1060 m, 10.XII.2019, leg. Murányi et al. (/18) from gravel on bank and under driftwood, singled (1 ♀, HNHM); CHILE: Malleco prov., 5 km E Curacautin, 38°28'S 71°37'W, 700 m [approx. 38°27'S 71°49'W, 640 m], 9.XI.1994, leg. R. Leschen & C. Carlton (#079) (1 ♂, SEMC).

Differential diagnosis. Similar to *Th. grandipennis*, but distinguishable by the not swirly elytral setation in the anterior half, smooth elytral surface, shorter antenna and darker legs.

Description. Measurements (in mm, n = 3): HW = 0.61 (0.60–0.62); TW = 0.56 (0.55–0.57); PW = 0.60 (0.60–0.61); SW = 0.90 (0.89–0.90); AW = 0.91 (0.88–0.95); HL = 0.42 (0.42–0.43); EL = 0.21 (0.20–0.22); TL = 0.10 (0.09–0.11); PL = 0.51 (0.50–0.52); SL = 1.11 (1.09–1.14); SC = 1.08 (1.06–1.11); FB = 2.08 (2.06–2.11); BL = 4.03 (3.97–4.07). Habitus as in Fig. 61. Lustre and colour. Body rather lustrous for the most part, punctation mostly fine and interspaces shiny, at least on more elevated spots, abdomen more strongly microsculptured, duller. Head, pronotum, abdomen, mouthparts and antennae blackish dark brown, legs reddish medium to dark brown. Elytra broadly dark brown around scutellum and shoulders but remaining half of surface much brighter, reddish. Shape and sculpture. Head with prominent supraantennal tubercles and arcuate longitudinal impressions mediad, eyes slightly longer than temples, latter perfectly rounded, slightly bulging. Neck delineated with occipital groove, vertex before neck slightly impressed. Antennae with middle segments almost twice as long as broad, penultimate articles just slightly longer than broad. Pronotum without anterior angles, corners broadly rounded, sides concave in posterior half; midline elevated, interrupted in middle by deep, transversal, U-shaped impression and elevation outside of it, disc strongly, obliquely impressed at the sides of posterior part, posteriorly bordered by arcuately elevated ridge. Elytra very slightly dilating posteriorly, apically with very thin marginal bead, oblique and straight in inner half, arched in outer half, there with membranous lobe; surface slightly uneven only in anterior half, faint impressions between shoulders and middle of suture. Apex of abdominal tergite VII with medially broader palisade fringe. Punctation and microsculpture. Clypeus with fine and dense coriaceous microsculpture, epistomal suture as a shinier, slightly incarved line. Head and pronotum punctate but somewhat unevenly, from rather dense to moderately dense, puncture sizes also varying (puncture interspaces from half of puncture diameter to twice of it). In impressed parts with strong ruggedness, elevated parts rather shiny and free of microsculpture. Neck with fine coriaceous microsculpture (very transverse cells), less shiny than rest of head. Elytra with much more even punctation, puncture interspaces slightly larger than puncture diameters, traces of coriaceous microsculpture in two impressed spots behind scutellum. Abdomen with very fine and very transverse coriaceous microsculpture, rather sparse, very fine punctation, average interspaces at least 4 × puncture diameters, denser and meshing with microsculpture towards antero-lateral corners of tergites. Pubescence. Body setation short and sparse, except a stronger bristle near anterior pronotal corner and another near mid-length of pronotal side.



Figs 82–86: *Thinodromus kadari* sp.n.: (82) male sternite VIII; (83) male tergite X; (84) aedeagus, frontal view; (85) median lobe, lateral view; (86) left paramere, lateral view, magnified (1.5 ×). Scale bar = 0.1 mm (86), 0.14 mm (82–83), 0.15 mm (84–85).

Elytral setation short and mostly directed posteriad but in outer posterior corners turning postero-laterad, side without conspicuously stronger setae. Abdominal tergites apically with longer, postero-mediad directed setae. Primary and secondary sexual features. Male sternite VIII as in Fig. 82, male tergite X as in Fig. 83. Aedeagus as in Figs 84–86.

Distribution and bionomics. This species is known from both Argentina and Chile, between latitudes 38–43° South. Two of its three known specimens have bionomical and habitat information, it was collected from gravel on riverbank under driftwood, the other refers to algaceous stony bank.

Etymology. This new species was found very early in the course of those 22 years I spent with this project. It is named after Ferenc Kádár, a carabid ecologist with the Plant Protection Institute of the Hungarian Academy of Sciences where I also worked between July 1992 and December 1996. He was the one who first brought me in contact with Győző Szél in the Coleoptera Collection of the Hungarian Natural History Museum and thereby indirectly started my career as professional taxonomist.

Thinodromus luteipes (SOLIER, 1849)

(Figs 58, 87–91, 161)

Homalotrichus luteipes SOLIER, 1849: 325.
Trogophloeus luteipes: KRAATZ, 1859: 6; FAIRMAIRE & GERMAIN, 1861: 450; FAUVEL, 1867: 31 [= FAUVEL, 1868: 36]; SÁIZ, 1969: 10.
Homalotrichus fuscus SOLIER, 1849: 325.
Trogophloeus spinicollis RYE, 1870: 8.
Trogophloeus (*Carpalimus*) *luteipes*: BERNHAUER & SCHUBERT, 1911: 96.
Trogophloeus (*Paracarpalimus*) *luteipes*: COIFFAIT & SÁIZ, 1968: 435.
Thinodromus luteipes: HERMAN, 1970: 387, HERMAN, 2001b: 1770, MAKRANCZY, 2006: 86, 108.

Studied type material. *Homalotrichus fuscus* – **Lectotype** ♂ (by present designation): "Santiago \ fuscus Sol.; type \ oculis majoritus; puncturnalia \ Type [framed, pink card] \ Coll. et det. A. Fauvel; T. luteipes; Sol.; R. I. Sc. N. B. 17479 \ Lectotypus; Homalotrichus; fuscus Solier; des. Makranczy, 2000 \ Thinodromus; luteipes Solier; det. Makranczy, 2000" (ISNB); **Paralectotypes** (2): "Santiago \ fuscus; Sol. \ Ex-Typis [in red] [framed]\ Coll. et det. A. Fauvel; T. luteipes; Sol.; R. I. Sc. N. B. 17479 \ Paralectotypus; Homalotrichus; fuscus Solier; des. Makranczy, 2000 \ Thinodromus; luteipes Solier; det. Makranczy, 2000" (2, ISNB).

Additional material. ARGENTINA: Catamarca prov., Famabalastro [26°51'40"S 66°18'20"W], 10.III.1922, leg. V. Weiser (1, NMPC); Catamarca prov., Hualfin [27°14.0'S 66°50.5'W], XII.1921, leg. V. Weiser (1, NMPC); Catamarca prov., Punta de Balasto [26°58'00"S 66°08'00"W], XI.1920, leg. V. Weiser (1, NMPC); Catamarca prov., Entre Rios, near San José, 26°50'S 66°02'W, 2100 m, 9.XI.1995, leg. L. Herman (9, AMNH, 1, NHMW); Catamarca, El Desmonte [26°53'S 66°06'W], 25.XI.1993, leg. J.G. Rozen (1, AMNH); San Luis prov., Lavaisse, Estancia Don Roberto [34°00'05"S 65°22'01"W], 17.X.1942, leg? W. Wittmer (1, BMNH), same but 18.X.1942 (4, BMNH); Buenos Aires prov., Médanos [38°49'S 62°40'W], 10.III.2008, leg. A. Cicchino, D.J. Carpintero, at light (9, MZUF, 1, NHMW); Buenos Aires prov., Laguna Chapalco [38 39'S 63 06'W], 14.I.1973, leg. S. Coscaron (1, AMNH); Buenos Aires prov., Oriente, (Estación) Zubiaurre [38°45'45"S 60°45'46"W], 26.X.1978, leg. Mision Cientifica Danesa (E. Nielsen & al.) (4) (2, ZMUC, 1, NHMW); Mendoza prov., 75 km NNE San Rafael, Reserva Ecológica de Ñacuñan, 34°02'42"S 67°54'34"W, 824 m, 17.I.2003, leg. F.C. Ocampo & A.B.T. Smith (3, FMNH); Neuquén prov., San Martin de Los Andes, 640 m [40°09'S 71°21"W], 17–31.X.1981, leg. E. Nielsen & O. Karsholt (11) (7, ZMUC); Neuquén prov., Zapala, (Cerro) El Marucho, 870 m [39°20'40"S 70°12'40"W], 26.X.1981, leg. M.O. Gentili (34) (14, ZMUC, 1 NHMW); Rio Negro prov., San Carlos de Bariloche, Colonia Suiza, 800 m [41°05'40"S 71°30'48"W], 22–23.X.1981, leg. E. Nielsen & O. Karsholt (9) (1, ZMUC); Rio Negro prov., 20 km E San Carlos de Bariloche, Río Ñirihuau [41°09'50"S 71°07'50"W], 15.I.1972, leg. L. Herman (853), leaf litter in river bed (1, AMNH); Rio Negro prov., 15 km N El Bolsón, Los Repollos, 600 m [41°50'52"S 71°25'20"W], 7.V.1961, leg. Gy. Topál (440), sifted soil from under stones on pasture near main road (3, HNHM); Rio

Negro prov., El Bolsón, 350 m, 7.I.1961, leg. Gy. Topál (221), at night on lamp of house (2, HNHM); Rio Negro prov., El Bolsón, W slope of Mt. Piltriquitron, 480 m [41°58'32"S 71°30'34"W], 21.III.1961, leg. Gy. Topál (341), from under stones in creek valley (5, HNHM); Rio Negro prov., El Bolsón, W slope of Mt. Piltriquitron, 920 m, 29.X.1961, leg. Gy. Topál (673), beaten from radal bushes in *Lomatia-Mulinum* stand (1, NHMW); Rio Negro prov., El Bolsón, W slope of Mt. Piltriquitron, 1000 m, 27.VI.1961, leg. Gy. Topál (468), under lying trunks on pasture (1, HNHM); Rio Negro prov., El Bolsón, W slope of Mt. Piltriquitron, 820 m, 15.IX.1961, leg. Gy. Topál (557), from under bits of wood on ground in nire [*Nothofagus antarctica*] stand (1, HNHM); Rio Negro prov., El Bolsón, foot of Mt. Piltriquitron, 820 m, 15.IX.1961, leg. Gy. Topál (510), from under bark of *Maytenus* and *Laurelia* trees (4, HNHM); Rio Negro prov., El Bolsón, foot of Mt. Piltriquitron, 350 m, 29.IX.1961, leg. Gy. Topál (581), beaten from blossoming *Berberis buxifolia* bushes (1, HNHM); Rio Negro prov., El Bolsón, forehill of Mt. Piltriquitron, 450 m, 29.VII.1961, leg. Gy. Topál (504), under bark of *Libocedrus chilensis* (3, HNHM); Rio Negro prov., El Bolsón, forehill of Mt. Piltriquitron, slope exposed to NE, 460 m, 12.X.1961, leg. Gy. Topál (32), sifted litter from sparse *Libocedrus-Lomatia* stand (1, HNHM); Rio Negro prov., El Bolsón, valley of Río Azul, 300 m, 24.VIII.1961, leg. Gy. Topál (14), sifted moss from soil in *Libocedrus* stand (1, HNHM), same but 2.IX.1961 (93), moss and lawn from pastures (1, HNHM); Rio Negro prov., El Bolsón, W slope of Loma del Medio, 420 m [41°56'40"S 71°33'10"W], 24.VII.1961, leg. Gy. Topál (498), from under stones on sheep run (2, HNHM), same but 7.X.1961 (599), beaten from round- and small-leaved, cinnamon-scented blossoming *Myrtacea* sp. (3, HNHM, 13, NHMW); Chubut prov., El Hoyo, 250 m [42°03'14"S 71°29'54"W], 5.V.1961 (438), sifted soil under and beside stones on pasture (1, HNHM); Chubut prov., El Hoyo, near Lago Espayo [Espejo], 1000 m [72°03.0'S 71°27.5'W], 8.X.1961 (603), beaten from budding *Berberis buxifolia* bushes on clearing of *Nothofagus antarctica* forest (4, HNHM).

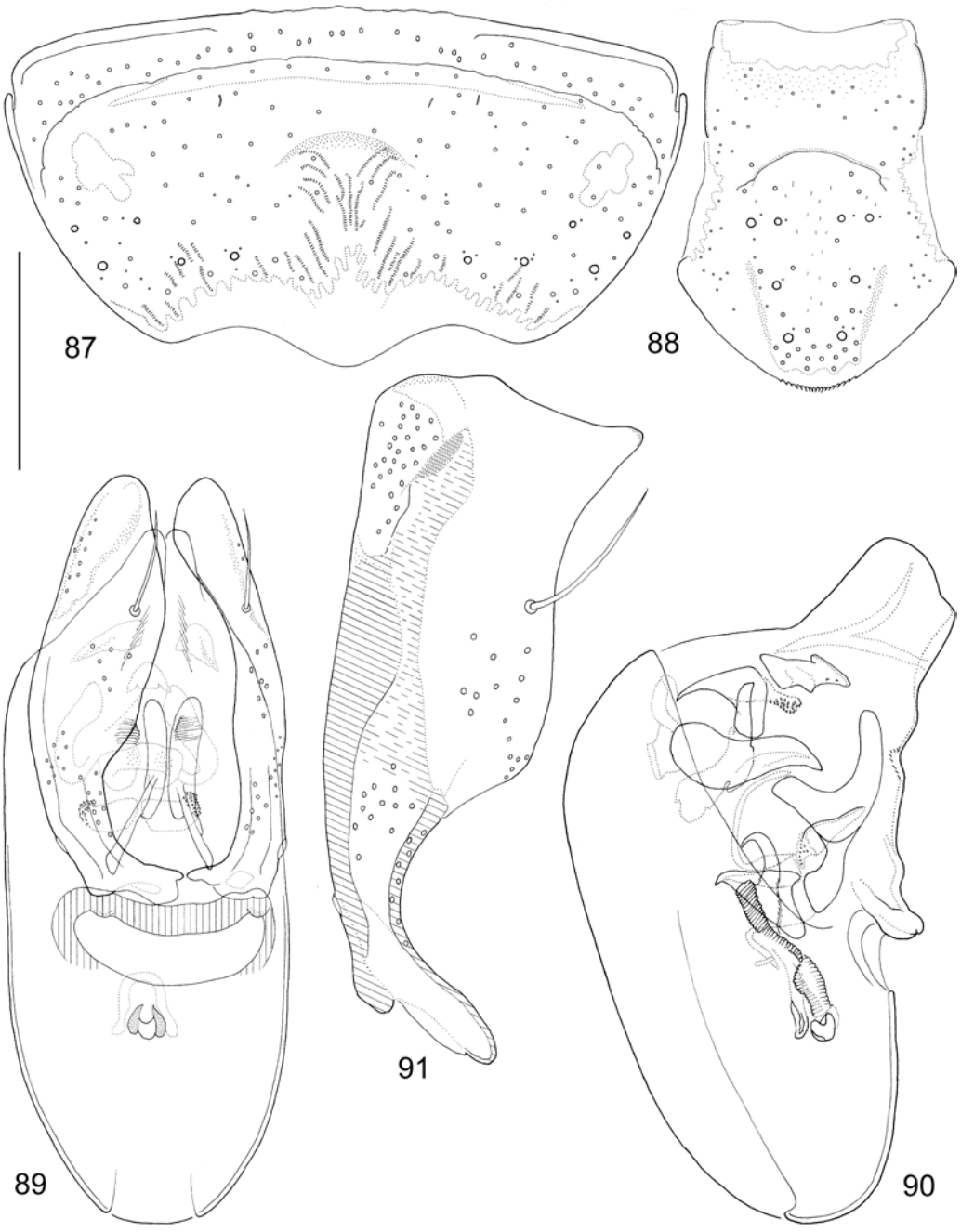
CHILE: Copiapó prov., Quebrada San Andrés at Puquios, 2300 m [27°00'10"S 69°38'50"W], 22.VI.1955, leg. L.E. Peña (2, FMNH); Copiapó prov., Copiapó [27°22'S 70°20'W], 29.IX.2006, leg. J.E. Barriga-Tuñón (5, MZUF); Huasco prov., Central termoeléctrica Guacolda [28°27'55"S 71°15'22"W], 25.II.2007, leg. C. Guerrero, trampa UV (6, MZUF); Huasco prov, Alto del Carmen, Quebrada Pinte, 1200 m [28°57'50"S 70°16'40"W], 1−2.XII.1967, leg. L.E. Peña (6, FMNH); Elquí prov., 50 km S La Serena [cuesta Las Cardas, 30°19'S 71°15'W], 1.XII.1950, leg. E.S. Ross & A.E. Michelbacher (1, CASC); Elqui prov., Rivadavia, Huanta (Guanta) [29°50'45"S 70°23'29"W], 16.V.1953, leg. L.E. Peña (2 ♂, 16, FMNH); Elqui prov., 5 mi S (Puente) Huanta [29°52.5'S 70°25.5'W], 7.XII.1950, leg. E.S. Ross & A.E. Michelbacher (2, CASC); Elqui prov., Vicuña, El Pangue, 900 m [30°09'12.2"S 70°39'48.2"W], X-XI.1961, coll. L.E. Peña (304, FMNH); Elqui prov., 10 mi W La Junta [Juntas del Toro, Río Elqui] [29°59'20"S 70°15'00"W, 1650 m], 7.XII.1950, leg. E. S. Ross & A. E. Michelbacher (1, CASC); Choapa prov., 15 mi S Los Vilos [32°07.0'S 71°30.5'W], 13.XII.1950, leg. E.S. Ross & A.E. Michelbacher (3, CASC); Choapa prov., Canela Baja, 900 m [31°23'54"S 71°27'27"W], 23.X.1961, leg. L.E. Peña (142, FMNH); Choapa prov., 5 mi N Illapel [31°33.5'S 71°10.0'W], 30.XI.1950, leg. E.S. Ross & A.E. Michelbacher (43, CASC); Aconcagua prov., tributary of Río Blanco, 1600 m [32°55'50"S 70°16'40"W], 10.XI.1963, leg. G.F. Edmunds (1, CNCI); Valparaiso prov., Concón, Aconcagua river [32°55.0'S 71°30.5'W], 16.XII.1950, leg. E.S. Ross & A.E. Michelbacher (1, CASC); Valparaiso prov., 20 km N Concón [32°45.0'S 71°28.5'W] 26.XI.1950, leg. E.S. Ross & A.E. Michelbacher (4, CASC); Valparaiso prov., El Tabo [33°27'31"S 71°39'43"W], 5.X.1966, leg. F. Sáiz (5, NHMW); Cordillera prov., Valle del Maipo, Lo Valdes, 2100 m [33°48'40"S 70°01'20"W], 13.II.1948, leg. L.E. Peña (21, FMNH), same but 28.III.1956, leg. L.E. Peña (2, FMNH); Santiago, SE, (district) La Florida [33°33'S 70°33'W] VII.1970, leg. J. Moroni (3, 1 ♀, NHMW); Santiago, Laguna de Acúleo, Quebrada El Árbol [33°51.5'S 70°53.0'W], X.1964, leg. F. Sáiz? (1, NHMW); Santiago, Pudahuel, Las Rucas de Pudahuel Motel, 435 m [33°26'S 70°49'W], 4.I.1983, leg. A. Newton & M. Thayer (ANMT 668.1), disturbed area, at UV blacklight (FMHD#83-869) (2, FMNH); Santiago, 19 km SW Santiago, Maipú, 500 m [33°29.5'S 70°45.5'W], 13.II.1948, leg. L.E. Peña (1, FMNH); Cordillera prov., Alfalfal [33°30'10"S 70°11'40"W], 1.III.1968 (5, NHMW); Cachapoal prov., La Esperanza [34°18'07"S 71°32'18"W], III.1956, leg. L.E. Peña (36, FMNH); Curicó prov., Curicó Mts., El Coigual [35°18'50"S 70°48'30"W], forests, X.1959, leg. L.E. Peña (1, FMNH); Curicó prov., Romeral [34°56'S 71°19'W], 25.I.1969, at light (11, NHMW); Talca prov., vicinity of Talca, 105 m [35°26'S 71°40'W], 9.XII.1982, leg. A. Newton & M. Thayer (ANMT 668.3), disturbed area, at UV blacklight (FMHD#82-790) (1, FMNH); Linares prov., Catillo [36°17'S 71°39'W], 18.III.1972, leg. T. Čekalović, Fototropica (37, CNCI); Ñuble prov., 40 km E San Carlos [36°25.0'S 71°30.0'W], 24.XII.1950, leg. E.S. Ross & A.E. Michelbacher (1, CASC); Ñuble prov., 50 km E San Carlos [36°18.5'S 71°24.0'W], 26.XII.1950, leg. E.S. Ross & A.E. Michelbacher (1, CASC); Concepción prov., Concepción [36°49'S 73°01'W], 30.I.1959, leg. F. Sáiz? (1, NHMW); Malleco prov., Angol [37°48.0'S

72°43.0'W], 31.XII.1950, leg. E.S. Ross & A.E. Michelbacher (2, CASC), same but 1.I.1951 (2, CASC); Cautín prov., 10 mi NE Pucón [39°11'10"S 71°49'40"W], 12.I.1951, leg. E.S. Ross & A.E. Michelbacher (3, CASC); Osorno prov., Aguas Calientes, Lago el Encanto – Toro, 40.74°S 72.30°W, 13.XII.2013, leg. T. Struyve, car-net (40.735°S–72.310°W to 40.780°S–72.239°W) (3, coll. Struyve, 1, NHMW); Chiloé prov. Isla Chiloé, 10 km N Castro, Piruquina [42°23.0'S 73°47.5'W], 25.II.1973, leg. T. Čekalović (1, CNCI).

URUGUAY: Montevideo (2, NHMW).

Redescription. Measurements (in mm, n = 10): HW = 0.53 (0.51–0.56); TW = 0.49 (0.47–0.52); PW = 0.57 (0.53–0.61); SW = 0.72 (0.68–0.77); AW = 0.76 (0.71–0.80); HL = 0.34 (0.32–0.36); EL = 0.19 (0.18–0.20); TL = 0.07 (0.06–0.08); PL = 0.45 (0.41–0.47); SL = 0.81 (0.74–0.86); SC = 0.79 (0.71–0.83); FB = 1.63 (1.55–1.72); BL = 3.03 (2.84–3.26). Habitus as in Fig. 58. Lustre and colour. Moderately lustrous, body covered with punctation and microsculpture, but interspaces mostly shiny. Head and abdomen blackish dark brown, pronotum and elytra orangish medium brown (darker around scutellum), apical band of elytra lighter, more orange. Legs and basal antennomeres medium brown, rest of antennae and mouthparts dark brown. Shape and sculpture. Head with prominent supraantennal tubercles and arcuate longitudinal impressions mediad, eyes more than twice as long as temples, latter imperfectly rounded, slightly bulging. Neck delineated with occipital groove, vertex before neck unimpressed. Antennae with middle segments imperceptibly elongate, penultimate articles slightly transverse. Pronotum with anterior corners moderately protruding but acute, sides gently arcuate anteriorly, indistinctly angled at anterior 1/3, posteriorly sides almost straight; midline elevated in posterior third, disc gently, obliquely impressed from its base directed to middle of sides, from behind bordered by knoblike elevations sitting near posterior corners; in some specimens these inconspicuous; near middle of pronotal side with insignificant impression. Elytra rather parallel-sided, apically with thin marginal bead, moderately arched, in outer half with membranous lobe; surface appearing rather even and convex. Apex of abdominal tergite VII with thin palisade fringe. Punctation and microsculpture. Clypeus with traces of coriaceous microsculpture, epistomal suture almost unmarked. Head and pronotum punctate, with rather evenly distributed punctures, traces of microsculpture; average interspaces about as puncture diameters. Neck with fine coriaceous microsculpture (isodiametric cells), less shiny than rest of head. Elytra with more even punctation, average puncture interspaces little less than puncture diameters, traces of coriaceous microsculpture, slight ruggedness only in two slight impressions behind scutellum. Abdomen with very shallow, slightly transverse coriaceous microsculpture, fine and medium sparse punctation (average interspaces 2−3 × puncture diameters) denser and with stronger microsculpture in antero-lateral corners of tergites. Pubescence. Body setation short and sparse, except a stronger bristle near anterior pronotal corner. Elytral setation directed posteriad but in outer posterior corners turning postero-laterad, side with a few stronger but short setae, rather inconspicuous. Abdominal tergites apically with longer, postero-mediad directed setae. Primary and secondary sexual features. Male sternite VIII as in Fig. 87, male tergite X as in Fig. 88. Aedeagus as in Figs 89–91. Spermatheca as in Fig. 161.

Distribution and bionomics. The species has a mainly Andean distribution (known from both Argentina and Chile) between latitudes 26–42° South, but between these latitudes also occur on lowlands in Argentina, even in Uruguay; introduced to England and NW France. In the Andes it was found in a wide range of habitats from streams in



Figs 87–91: *Thinodromus luteipes*: (87) male sternite VIII; (88) male tergite X; (89) aedeagus, frontal view; (90) median lobe, lateral view; (91) left paramere, lateral view, magnified (1.5 ×). Scale bar = 0.1 mm (91) 0.15 mm (89–90), 0.18 mm (88), 0.21 mm (87).

both deserts and forests to riverbanks (e. g. leaflitter in riverbeds) but also in disturbed areas even urban localities and flies to light. The lowland habitats are apparently ponds.

Comment. No type for *Homalotrichus luteipes* has been found, the original type locality is Coquimbo and the Cordilleras at Elquí (river). Two specimens from the Fairmaire collection (ISNB) are bearing curator's type labels but lacking any original labelling and cannot be treated as syntypes (these 2 specimens belong to two different species).

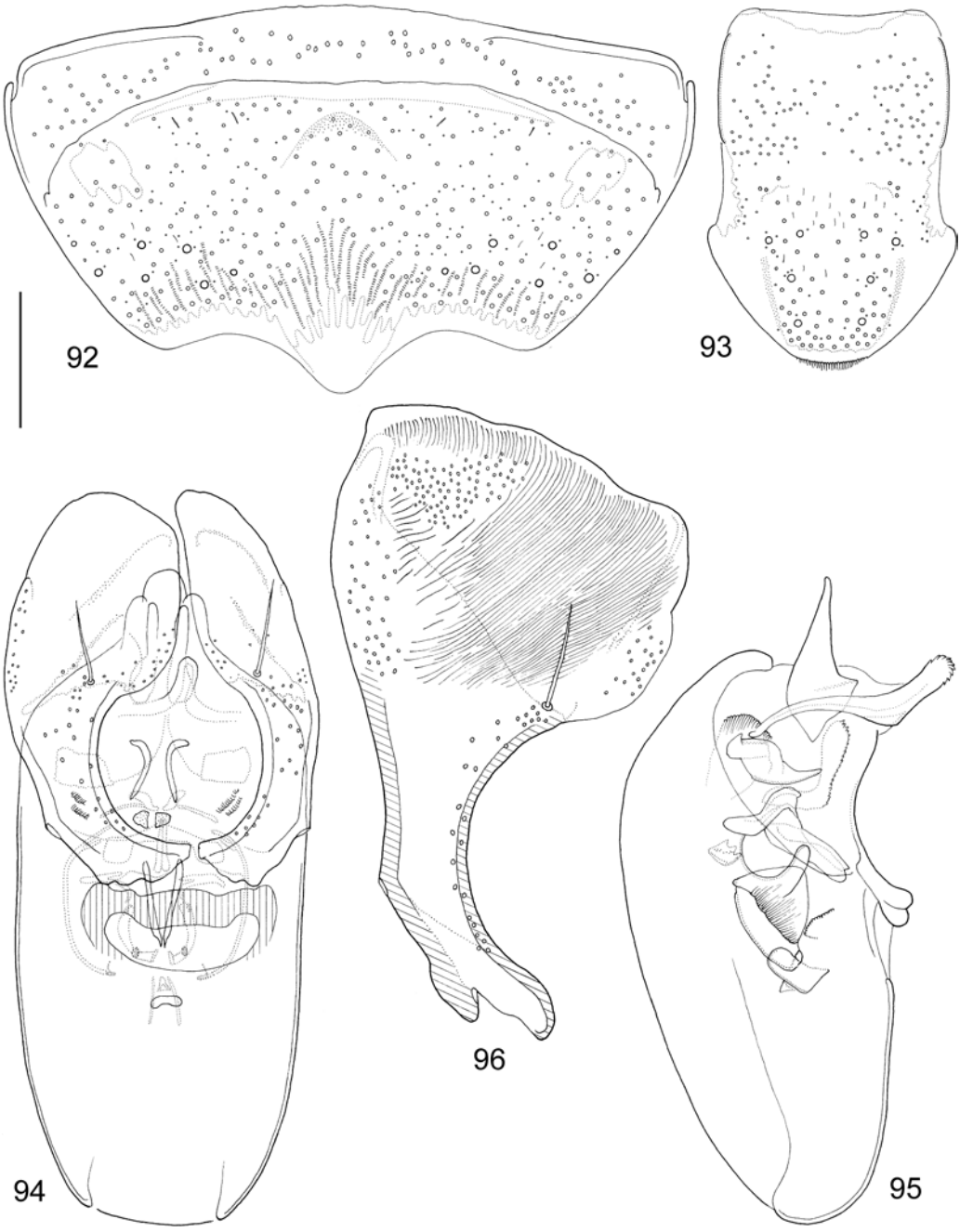
Thinodromus magnipennis (BERNHAUER, 1915)
(Figs 65, 92–96)

Trogophloeus magnipennis BERNHAUER, 1915: 291.
Trogophloeus (*Trogophloeus*) *magnipennis*: SCHEERPELTZ, 1933: 1086.
Carpelimus magnipennis: HERMAN, 1970: 392, HERMAN, 2001b: 1677. (erroneous generic assignment)

Type material. Holotype ♂: "~~Bras~~. [ARGENTINA] Channar; Reg. [Chañar = Mendoza 'district'] lg. Jensen [X.1906–III.1907] \ magnipennis; Bernh.; Typus unic. \ Chicago NHMus; M. Bernhauer; Collection \ Holotypus; Trogophloeus; magnipennis Bernh.; ver. Makranczy, 2004 \ Thinodromus; magnipennis (Bernhauer); det. Makranczy, 2004" (FMNH).

Additional material. CHILE: Colchagua prov., Puente Negro, Río Tinguiririca, 34.677°S 70.871°W, 1.XII.2013, leg. T. Struyve, large river with huge gravel banks, leafpacks sifted (1, coll. Struyve, 1 ♂, NHMW); Osorno prov., Aguas Calientes, Lago el Encanto – Toro, 40.74°S 72.30°W, 13.XII.2013, leg. T. Struyve, car-net (40.735°S–72.310°W to 40.780°S–72.239°W) (1, coll. Struyve).

Redescription. Measurements (in mm, n = 4): HW = HW = 0.78 (0.75–0.80); TW = 0.74 (0.73–0.75); PW = 0.78 (0.76–0.79); SW = 1.06 (1.04–1.09); AW = 1.20 (1.14–1.26); HL = 0.55 (0.54–0.56); EL = 0.25 (0.23–0.27); TL = 0.16 (0.14–0.17); PL = 0.67 (0.64–0.68); SL = 1.26 (1.20–1.30); SC = 1.22 (1.16–1.26); FB = 2.53 (2.47–2.59); BL = 4.64 (4.33–4.81). Habitus as in Fig. 65. Lustre and colour. Body weakly lustrous; punctation so fine and dense, although not uniformly microsculptured, giving surface a greasy lustre. Head and abdomen blackish dark brown, pronotum dark brown with reddish tint, legs, mouthparts and antennae reddish medium to dark brown; elytra orangish medium brown, around scutellum darker. Shape and sculpture. Head with prominent supraantennal tubercles and arcuate longitudinal impressions mediad, eyes almost twice as long as temples, latter imperfectly rounded, slightly bulging. Neck delineated with occipital groove, vertex before neck slightly impressed. Antennae with middle segments about twice as long as broad, penultimate articles slightly elongate. Pronotum with anterior corners almost completely absent (from dorsal view) though slight angle perceivable, anterior half of sides gently arcuate, posterior half concave; midline elevated in posterior half, disc strongly impressed at the sides of posterior part, posteriorly bordered by arcuately elevated ridge; besides middle of midline two small longitudinal elevations separated by small, round impressions. Elytra slightly dilating posteriorly, apically with thin marginal bead, oblique and straight in inner half strongly arched in outer half, there with very thin membranous lobe; surface somewhat uneven anteriorly, shallow impressions from shoulder to middle of disc. Apex of abdominal tergite VII with medially broader palisade fringe. Punctation and microsculpture. Clypeus with fine and shallow coriaceous microsculpture, epistomal suture as a shiny stripe. Head and pronotum extremely finely and rather densely punctate, varying density, most interspaces exceeding diameters of punctures, very fine coriaceous microsculpture except most elevated parts, still rather shiny. Neck with fine coriaceous microsculpture (very



Figs 92–96: *Thinodromus magnipennis*: (92) male sternite VIII; (93) male tergite X; (94) aedeagus, frontal view; (95) median lobe, lateral view; (96) left paramere, lateral view, magnified (1.5 ×). Scale bar = 0.1 mm (96) 0.15 mm (94–95), 0.18 mm (93), 0.19 mm (92).

transverse cells), less shiny than rest of head. Elytra with similar punctation, puncture interspaces about twice as puncture diameters, with traces of coriaceous microsculpture, ruggedness only in two very shallow impressions behind scutellum. Abdomen with fine and dense but rather shallow punctation and slightly transverse coriaceous microsculpture making surface greasy lustered; interspaces on average larger than puncture diameters. Pubescence. Body setation very short and dense, except a stronger bristle near anterior pronotal corner and another at 2/5 length of side. Elytral setation extremely short and fine, directed posteriad but near inner posterior corners turning postero-laterad, side without peculiar setae. Abdominal tergites apically with longer, postero-mediad directed setae. Primary and secondary sexual features. Male sternite VIII as in Fig. 92, male tergite X as in Fig. 93. Aedeagus as in Figs 94–96.

Distribution and bionomics. The species is known from both Chile and Argentina, between latitudes 32–41° South. For the one Argentinian and two Chilean records of this species only one has bionomical information, it was sifted from leafpacks at the gravelbank of a river.

Comment. Besides being very large this is one of the rarest species but apparently widely distributed.

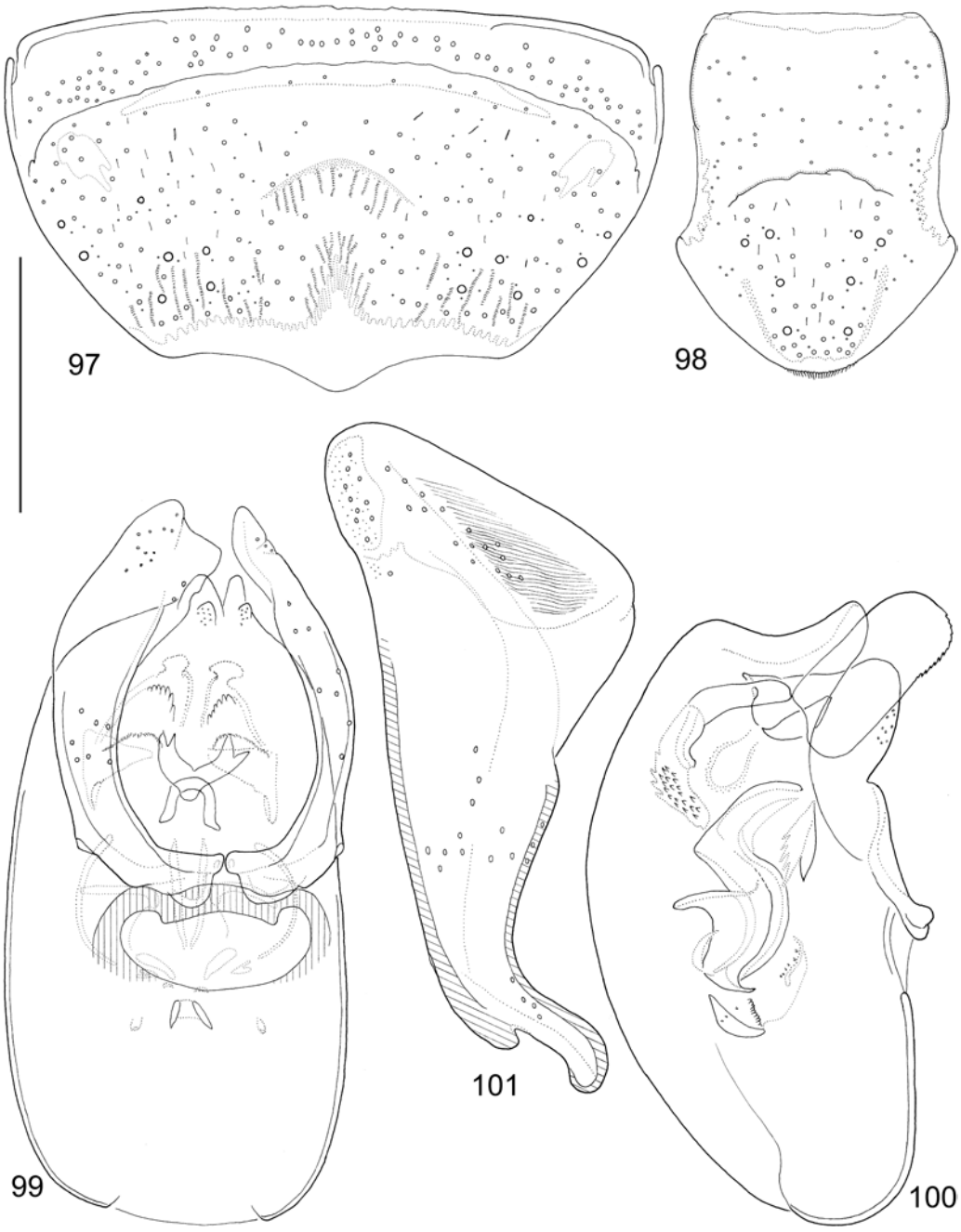
Thinodromus newtonorum sp.n.
(Figs 59, 97–101)

Type locality. Chile, Osorno prov., Parque Nac. Puyehue, 3.1 km E Anticura, Salto Los Novios, approx. 40°39.5'S 72°09.0'W, 415 m.

Type material. Holotype ♂: "CHILE: Osorno prov.; Parque Nac. Puyehue.; 3.1 km E Anticura; Salto Los Novios,; 415 m [40°39.5'S 72°09.0'W], 19.xii.1982; river flood debris; [leg.] A. Newton & M. Thayer [ANMT 662.1, FMHD#82-853]" (FMNH). **Paratypes** (32): same data as holotype (2 ♀, 15, AMNH, 1 ♂, 1 ♀, BMNH, 1 ♂, 1 ♀, NHMW, 1 ♂, NMPC, 1, MHNG, 1, ZMHB, 1, ZMUC); Ñuble prov., 19.5 km ESE Recinto, Las Trancas, 1250 m [36°54'S 71°28'W], 3.I.1983, leg. A. Newton & M. Thayer (ANMT 647), *Nothofagus* forest, small forest stream, among rocks and flood debris (1 ♂, AMNH); Cautín prov., Parque Nacional Huerquehue, Lago Chico, 39°08'S 71°43'W, 1250–1350 m, 23.XII.1990, leg. D. Agosti & D. Burckhardt (18a), *Araucaria-Nothofagus* forest, sifting of vegetational debris and moss (5, MHNG, 1, NHMW).

Differential diagnosis. Similar in appearance to *Th. nitidifrons*, but slightly larger and without angular anterior pronotal corners.

Description. Measurements (in mm, n = 10): HW = 0.52 (0.50–0.54); TW = 0.51 (0.48–0.52); PW = 0.55 (0.52–0.57); SW = 0.68 (0.65–0.70); AW = 0.77 (0.73–0.83); HL = 0.38 (0.36–0.40); EL = 0.17 (0.16–0.18); TL = 0.11 (0.10–0.12); PL = 0.48 (0.45–0.50); SL = 0.79 (0.72–0.83); SC = 0.76 (0.69–0.80); FB = 1.69 (1.57–1.75); BL = 3.30 (3.01–3.47). Habitus as in Fig. 59. Lustre and colour. Body moderately lustrous, punctate but with significant interspaces lightly microsculptured. Head, pronotum and abdomen blackish dark brown, elytra contrastingly reddish medium brown except around scutellum and along suture infuscate, Legs and first antennomeres reddish medium brown, rest of antennae, mouthparts and apices of tibiae dark brown. Shape and sculpture. Head with prominent supraantennal tubercles and arcuate longitudinal impressions mediad, eyes only slightly longer than temples, latter imperfectly rounded, slightly bulging. Neck delineated with occipital groove, vertex before neck unimpressed. Antennae with middle segments only



Figs 97–101: *Thinodromus newtonorum* sp.n.: (97) male sternite VIII; (98) male tergite X; (99) aedeagus, frontal view; (100) median lobe, lateral view; (101) left paramere, lateral view, magnified (1.5 ×). Scale bar = 0.1 mm (101) 0.15 mm (99–100), 0.21 mm (98), 0.24 mm (97).

slightly elongate, penultimate antennomeres very slightly transverse. Pronotum with anterior corners barely marked (very obtuse-angled) and appearing broadly rounded, sides moderately arcuate in anterior half, slightly concave in posterior half; midline slightly elevated, very faintly anteriorly, disc obliquely impressed at the sides of both anterior and posterior part, posteriorly bordered by prebasal, slightly elevated ridge; besides anterior midline two small and faint elevations, outwards sides of disc slightly depressed. Elytra very slightly dilating posteriorly, apically with thin marginal bead, moderately arched, slightly oblique, in outer half with very thin membranous lobe; surface appearing very even and convex, only with the regular impressions behind scutellum. Abdominal sternites with saddle in middle of prebasal grooves, laterally with a slight step about at distance of laterotergite width from side. Apex of abdominal tergite VII with thin, medially broader palisade fringe. Punctation and microsculpture. Clypeus with very fine and dense microsculpture, epistomal suture as a transversal impressed line. Head with variably sized, mostly fine punctures (interspaces at least equal to puncture diameters), on elevated parts even looser punctation, microsculpture fading, surface mostly shiny. Neck with fine coriaceous microsculpture of very transverse cells, rather dull. Pronotum with more even punctation, interspaces about same as puncture diameters, mostly shiny. Elytra with only slightly rougher punctation, puncture interspaces slightly less than puncture diameters, slight ruggedness only in two impressions behind scutellum. Abdomen with very fine and faint, transverse coriaceous microsculpture, very fine and rather sparse punctation (average interspaces 1.5 × puncture diameters), microsculpture completely absent posteriorly. Pubescence. Body setation short and sparse, except a stronger bristle near anterior pronotal corner and one before mid-length of pronotal side. Elytral setation directed posteriad, side without conspicuously stronger setae. Abdominal tergites apically with longer, postero-mediad directed setae, basolateral corners with denser, laterally directed setae. Primary and secondary sexual features. Male sternite VIII as in Fig. 97, male tergite X as in Fig. 98. Aedeagus as in Figs 99–101.

Distribution and bionomics. This species is known only from Chile, between latitudes 36–41° South. It was only encountered twice, collected at a river and a small stream, among rocks and flood debris in a *Nothofagus* forest.

Etymology. The species is named after Alfred Newton and Margaret Thayer, who helped this project in numerous ways, so many that it is almost impossible to account for. Perhaps the most important aspect to mention is that their data recording is exemplary, even for the older collecting events, there are extensive notes, databases, associated larval specimens and records detailed enough to extract useful bionomical information.

Thinodromus nitidifrons (FAUVEL, 1867)

(Figs 11, 102–106)

Trogophloeus nitidifrons FAUVEL, 1867: 33 [= FAUVEL, 1868: 38].
Trogophloeus (*Thinodromus*) *nitidifrons*: BERNHAUER & SCHUBERT, 1911: 94.
Trogophloeus (*Paracarpalimus*) *nitidifrons*: COIFFAIT & SÁIZ, 1968: 439 (misidentification).
Trogophloeus (*Paracarpalimus*) *ocultus* COIFFAIT & SÁIZ, 1968: 440, **syn.n.**
Thinodromus nitidifrons: HERMAN, 1970: 387, HERMAN, 2001b: 1772.

Studied type material. *Trogophloeus nitidifrons* – **Lectotype** ♂ (by present designation): "Chili; Santiago / Ex-Typis \ Coll. et det. A. Fauvel; T. nitidifrons; Fvl.; R. I. Sc. N. B. 17479 \ Lectotypus; Trogophloeus; nitidifrons Fauvel; des. Makranczy, 2000 / Thinodromus; nitidifrons Fauvel; det. Makranczy, 2000" (ISNB);

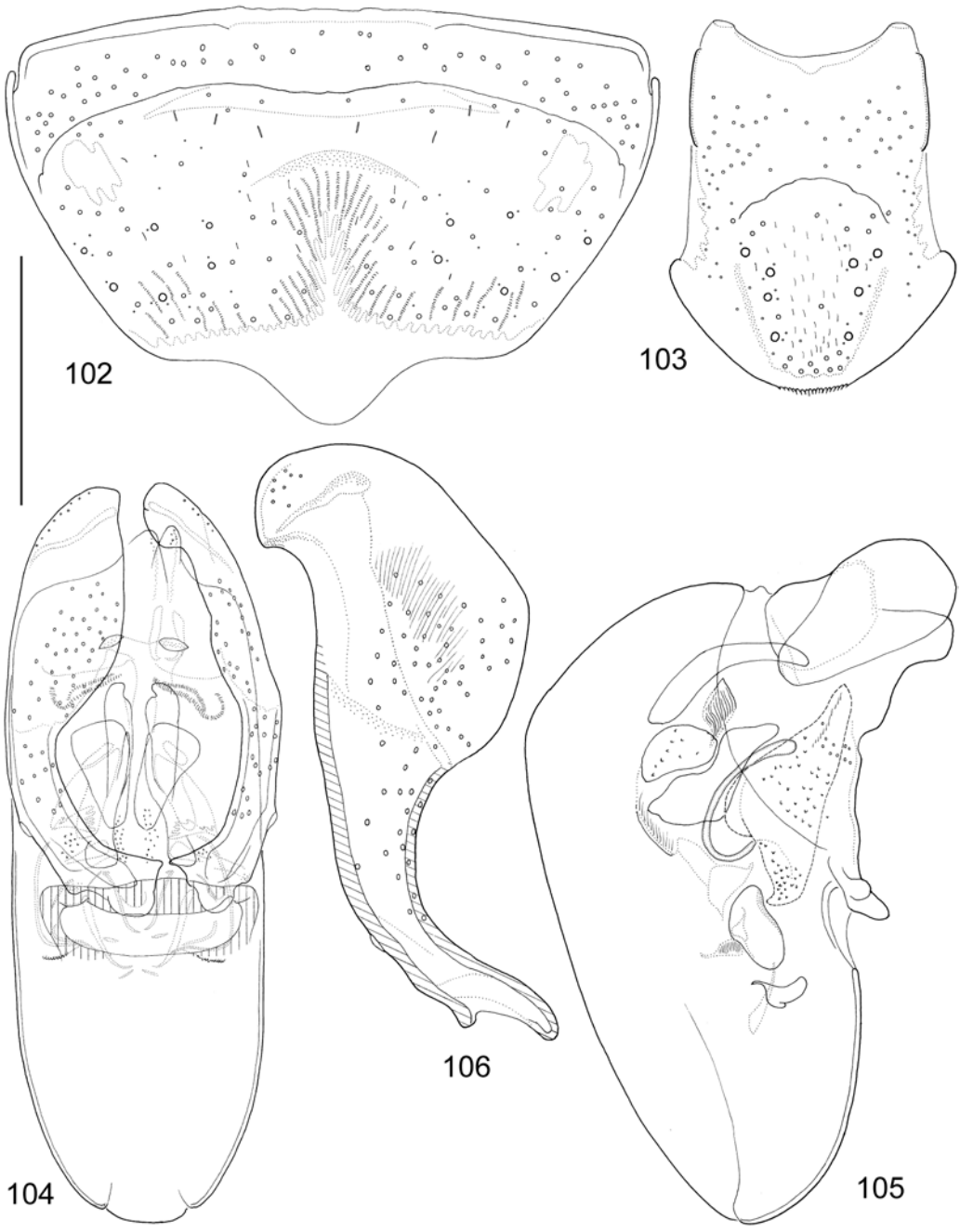
Paralectotype (1): "Chili; Santiago / nitidifrons; Fvl. \ R. I. Sc. N. B. 17.479; Trogophloeus; Coll. et det. A. Fauvel / Ex-Typis \ Paralectotypus; Trogophloeus; nitidifrons Fauvel; des. Makranczy, 2000 / Thinodromus; nitidifrons Fauvel; det. Makranczy, 2000" (1, ISNB).

Trogophloeus ocultus – **Neotype** ♂ (by present designation): "Valparaiso / Coll. et det. A. Fauvel; T. nitidifrons; Fvl.; R. I. Sc. N. B. 17.479 / Neotypus; Trogophloeus; ocultus Coiffait & Saiz; des. Makranczy, 2014 / Thinodromus; nitidifrons (Fauvel); det. Makranczy, 2014" (ISNB).

Additional material. CHILE: Los Andes prov., Portillo, 48 km E Los Andes, 2683 m, 32°50.940'S 70°08.516'W, 14.I.2006, leg. M. Schülke (10), Schneefeldrand unter Steinen (1, coll. Schülke, ZMHB).

Redescription. Measurements (in mm, n = 4): HW = 0.46 (0.44–0.47); TW = 0.45 (0.43–0.46); PW = 0.48 (0.46–0.50); SW = 0.61 (0.59–0.65); AW = 0.64 (0.63–0.66); HL = 0.33 (0.32–0.34); EL = 0.14 (0.13–0.15); TL = 0.10 (0.095–0.105); PL = 0.39 (0.38–0.41); SL = 0.68 (0.66–0.70); SC = 0.65 (0.63–0.67); FB = 1.42 (1.40–1.47); BL = 2.72 (2.61–2.86). Habitus as in Fig. 11. Lustre and colour. Body weakly lustrous, rather roughly punctate and densely microsculptured, interspaces on elytra barely shinier, but punctation interspaces larger and shinier on pronotum. Head and abdomen blackish dark brown, pronotum, mouthparts and antennae dark brown, legs reddish medium to dark brown, elytra often lighter, orangish medium brown (darker around scutellum). Shape and sculpture. Head with prominent supraantennal tubercles and arcuate longitudinal impressions mediad, eyes slightly longer than temples, latter imperfectly rounded, slightly bulging. Neck delineated with occipital groove, vertex before neck unimpressed. Antennae with middle segments slightly transverse, last 3 antennomeres bulkier than preceding, penultimate a third broader than long. Pronotum with anterior corners barely marked but sharp, arcuate sides insignificantly concave in posterior half; midline slightly elevated, very faintly anteriorly, disc impressed at the sides of posterior part, posteriorly bordered by short, elevated ridge; besides anterior midline two small and faint elevations. Elytra very slightly dilating posteriorly, apically with thin marginal bead, moderately arched, slightly oblique, in outer half with membranous lobe; surface appearing very even and convex, only with the regular impressions behind scutellum. Apex of abdominal tergite VII with thin palisade fringe. Punctation and microsculpture. Clypeus without microsculpture, epistomal suture as an unpunctured, slightly elevated stripe. Head and pronotum with rather rough punctures (interspaces less than puncture diameters), however loosened or even missing medially, microsculpture missing, surface mostly shiny. Neck with fine coriaceous microsculpture (isodiametric cells), less shiny than rest of head. Elytra with more even punctation, puncture interspaces about half as puncture diameters, slight ruggedness only in two impressions behind scutellum. Abdomen with very shallow, slightly transverse coriaceous microsculpture, very fine and medium sparse punctation (average interspaces 3–4 × puncture diameters) denser and with stronger microsculpture in antero-lateral corners of tergites. Pubescence. Body setation short and sparse, except a stronger bristle near anterior pronotal corner and one at 1/3 length of pronotal side. Elytral setation directed posteriad but in outer posterior corners turning postero-laterad, side without conspicuously stronger setae. Abdominal tergites apically with longer, postero-mediad directed setae. Primary and secondary sexual features. Male sternite VIII as in Fig. 102, male tergite X as in Fig. 103. Aedeagus as in Figs 104–106.

Distribution and bionomics. This species is known only from Chile, between latitudes 32–34° South. The only bionomical information belongs to a single specimen found under stones at the edge of a melting snowpatch.



Figs 102–106: *Thinodromus nitidifrons*: (102) male sternite VIII; (103) male tergite X; (104) aedeagus, frontal view; (105) median lobe, lateral view; (106) left paramere, lateral view, magnified (1.5 ×). Scale bar = 0.1 mm (106) 0.15 mm (104–105), 0.19 mm (103), 0.21 mm (102).

Comment. The two specimens of "*Tr. ocultus*" labelled as paratypes are of dubious origin (without locality) and not types (see also in the Introduction). The original description of *Trogophloeus ocultus* mentions a single male specimen as the type (holotype), on which this taxon is solely based. Under the circumstances detailed in the intruduction, it is most likely lost or destroyed by earthquake. The verbal diagnosis compares the new taxon to *Tr. nitidifrons* Fauvel, but no male characters are described or illustrated for the latter species. The key couplet refers to character states under "*Tr. ocultus*" that are true for the lectotype of *Th. nitidifrons*. Because the character states given for the latter are mostly false, a conclusion was reached that the authors were assigning the wrong species to the name "*nitidifrons*". The drawing of the male genitalia of "*Tr. ocultus*" is in perfect match with the aedeagus of *Th. nitidifrons*, except for the basal part, that is most likely a result of distortion. Francisco Sáiz made his drawings from regular microscopic slide preparations where the more bulbous parts of genital structures usually suffered squeeze and deformation by the cover slip and recession of medium. The parameres and the illustrated internal sclerites in the apical part of the aedeagus agree satisfactorily with those of *Th. nitidifrons*. As a conclusion, this all suggests that the taxon *Th. nitidifrons* was misidentified by the authors and the type of "*Tr. ocultus*" was actually a specimen of *Th. nitidifrons*; in order to ensure the further use of the name in this sense a neotype is designated.

Thinodromus obscurus (Solier, 1849)

(Figs 7, 107–111, 162)

Homalotrichus obscurus Solier, 1849: 325.
Trogophloeus obscurus: Kraatz, 1859: 6; Fairmaire & Germain, 1861: 450; Fauvel, 1867: 32 [= Fauvel, 1868: 37]; Sáiz, 1969: 10.
Trogophloeus mersus Fairmaire & Germain, 1861: 448.
Trogophloeus (*Carpalimus*) *obscurus*: Bernhauer & Schubert, 1911: 96.
Trogophloeus (*Paracarpalimus*) *obscurus*: Coiffait & Sáiz, 1968: 438.
Carpelimus obscurus: Herman, 2001a: 42, Herman, 2001b: 1684. (erroneous generic assignment)

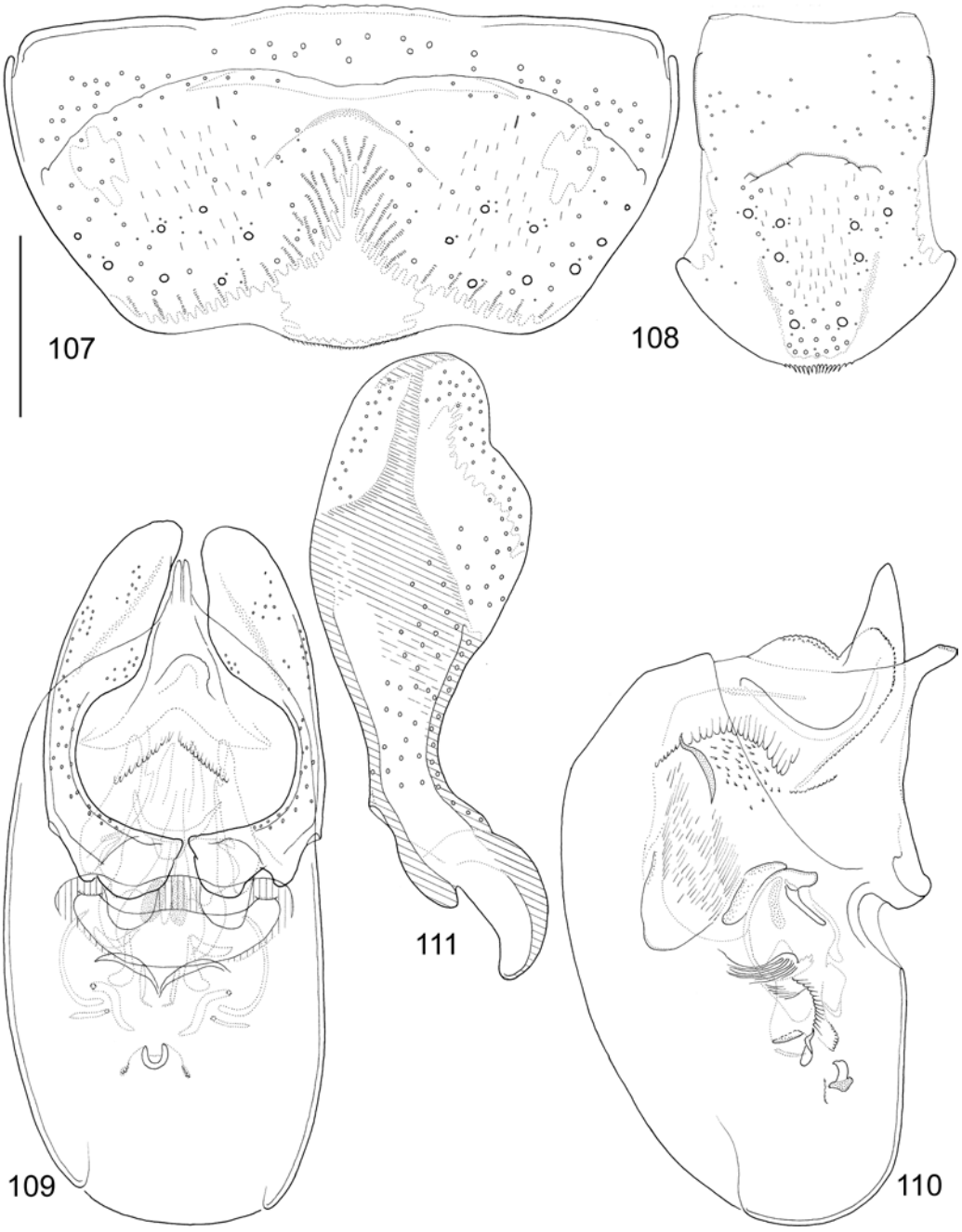
Studied type material. *Homalotrichus obscurus* – **Neotype** ♂ (by present designation): "[CHILE: Cordillera prov.,] Mina La Disputada [= Mina Los Bronces]; los canales [33°08'50"S 70°18'40"W, 3250 m] 19-XI-[19]68 / Neotypus; Homalotrichus; obscurus Solier; des. Makranczy, 2021 / Thinodromus; obscurus (Solier); det. Makranczy, 2021" (NHMW).

Trogophloeus mersus – **Lectotype** ♂ (by present designation): "233 [Plateaux élevés des Cordilières, à 3,300 et 3,600 mètres, accroché sous les pierres dans les ruisseaux] \ mersus; nsp \ Chili \ Coll; Fairmaire \ Trogophloeus; obscurus Sol. \ A. Fauvel; Determ. 1903 \ Ex-Typis \ Coll. et det. A. Fauvel; R. I. Sc. N. B. 17.479 \ Lectotypus; Trogophloeus; mersus Fairm. & G.; des. Makranczy, 2000 \ Thinodromus; obscurus Solier; det. Makranczy, 2000" (ISNB); **Paralectotypes** (14): "233 \ mersus; nsp \ Chili \ Coll; Fairmaire \ Trogophloeus; obscurus Sol. \ A. Fauvel; Determ. 1903 \ Ex-Typis \ Coll. et det. A. Fauvel; R. I. Sc. N. B. 17.479 \ Paralectotypus; Trogophloeus; mersus Fairm. & G.; des. Makranczy, 2000 \ Thinodromus; obscurus Solier; det. Makranczy, 2000" (8, ISNB); Syn-; type [light blue margined disc, curator label] \ Trogophloeus; stricticollis; Fair; & Ger.; Chili [framed] \ Type \ Germain \ Chili \ Fry Coll.; 1905-100. \ Trogophloeus; mersus F. & G.; P.M. Hammond; det. 1973; Syntype \ Paralectotypus; Trogophloeus; stricticollis Fairm. & G.; des. Makranczy, 2000 \ Thinodromus; obscurus Solier; det. Makranczy, 2000" (4, BMNH); "247 \ Coll; Fairmaire \ Trogophloeus; obscurus Sol. \ A. Fauvel; Determ. 1903 \ Coll. et det. A. Fauvel; R. I. Sc. N. B. 17.479 \ Paralectotypus; Trogophloeus; mersus Fairm. & G.; des. Makranczy, 2000 \ Thinodromus; obscurus Solier; det. Makranczy, 2000" (2, ISNB).

Additional material. ARGENTINA: Neuquén, surroundings of Aluminé, 1200 m [39°14'S 70°56'W], 14.III.1979, leg. Mision Cientifica Danesa (E. Nielsen & al.) (57) (2, ZMUC, 1, NHMW).

CHILE: Aconcagua prov., tributary of Río Blanco, 1600 m [32°55'50"S 70°16'40"W], 10.XI.1963, leg. G.F. Edmunds (1, CNCI); Los Andes prov., Portillo, 48 km E Los Andes, 2683 m, 32°50.940'S 70°08.516'W, 14.I.2006, leg. M. Schülke (10), Schneefeldrand unter Steinen (1 ♀, 7, coll. Schülke, ZMHB); Cordillera prov., Mina La Disputada [= Mina Los Bronces], los canales [33°08'50"S 70°18'40"W, 3250 m] 19.XI.1968 (23, NHMW); Cordillera prov., Farellones, 2700 m, 8.IV.1962, leg. L.E. Peña (7, FMNH); Cordillera prov., ca. 20 km E Santiago, road to Farellones [33°22.0'S 70°25.5'W], 1.V.1987, leg. P.D. Perkins, stream debris (8, FMNH); Cordillera prov., Lo Valdés, Baño Colina [33°49.5'S 70°03.0'W], 2−3.IV.1959, coll. L. Peña (3, FMNH); Cordillera prov., San José de Maipo, Río Maipo, ca. 33°40'S 70°05'W, 1000 m, IV.1947 and IV.1948 (also 1.VII.1947), leg. L.E. Peña (245, FMNH, 1 ♂, 9, NHMW, 1 ♂, 1 NMPC, 1, MHNG, 1, NMPC, 1 ♂, 1 ♀, HNHM); Cordillera prov., Cajon del Maipo, Embalse el Yeso 2400–2600 m, along path below the lake [33°40'30"S 70°05'10"W], 17.XI.1968, leg. H. Franz (Sa 200) (9, NHMW); Ñuble, Volcán Chillán, [Cabañas] Las Cabras, 1400 m [36°54.0'S 71°28.5'W], 4.II.1963, leg. L.E. Peña (1, FMNH); Ñuble, 12 km E Recinto, Las Trancas (SW slopes of volcán Nevados de Chillán) [36°54.5'S 71°31.5'W], 25.I.1977, leg. G. Moreno (3, AMNH); Ñuble prov., 75 km E Chillán, Shangri-La, 1650 m [36°52.5'S 71°28.5'W], 15–16.XII.1976, leg. H.F. Howden, *Nothofagus* (4, CNCI); Ñuble prov., Cordillera de Chillán, Las Termas de Chillán [36°54'S 71°31'W], 2–16.II.1978, G. Moreno (1, AMNH); Ñuble prov., Las Termas de Chillán, 1800−1900 m [36°54'08"S 71°24'17"W], 25−27.XII.1968, leg. H. Franz (Sa 212) (1, NHMW).

Redescription. Measurements (in mm, n = 10): HW = 0.52 (0.49–0.54); TW = 0.50 (0.47–0.52); PW = 0.54 (0.50–0.58); SW = 0.73 (0.67–0.77); AW = 0.77 (0.72–0.83); HL = 0.36 (0.33–0.38); EL = 0.16 (0.15–0.18); TL = 0.10 (0.09–0.11); PL = 0.44 (0.39–0.47); SL = 0.82 (0.75–0.86); SC = 0.79 (0.72–0.83); FB = 1.65 (1.51–1.73); BL = 3.15 (2.90–3.34). Habitus as in Fig. 7. Lustre and colour. Body moderately lustrous, punctate but forebody less densely miscrosculptured, elevated parts on pronotum rather shiny. Blackish dark brown, almost pitch black, tibiae and tarsi sometimes little lighter. Shape and sculpture. Head with prominent supraantennal tubercles and arcuate longitudinal impressions mediad, eyes almost a third longer longer than temples, latter perfectly rounded, bulging. Neck delineated with occipital groove, vertex before neck insignificantly impressed. Antennae with middle segments very slightly elongate, last four articles bulkier than preceding, slightly transverse. Pronotum with anterior corners moderately protruding, nearly right-angled, sides only slightly arcuate, posteriorly straight; midline elevated (mostly in posterior half), strong impressions at its base, posteriorly bordered by arcuately elevated ridge; besides middle of midline also two shallow impressions; near middle of pronotal side somewhat impressed. Elytra rather parallel-sided, apically more or less straight but slightly oblique with thin marginal bead, in outer half with membranous lobe; surface rather even, with shallow, oblique impressions from shoulder to middle of disc. Apex of abdominal tergite VII with medially somewhat broader palisade fringe. Punctation and microsculpture. Clypeus with shallow coriaceous microsculpture, epistomal suture as a fine and shallow incarved line. Head and pronotum medium strongly punctate, average puncture interspaces little less than puncture diameters; fine coriaceous microsculpture apparent mostly in depressions, much faded and rather shiny on elevated parts (with loosened punctation). Neck with fine coriaceous microsculpture (slightly transverse cells), less shiny than rest of head. Elytra with slightly stronger punctation than on head, about the same strength but more even than pronotum, puncture interspaces little less than puncture diameters, without microsculpture, some ruggedness only in two impressions behind scutellum. Abdomen with fine, mostly shallow, slightly transverse coriaceous microsculpture, sparse and rather fine punctation, average interspaces 3−4 × puncture diameters. Pubescence. Body setation short and sparse, except a stronger bristle near anterior pronotal corner and another at 3/5 length of side. Elytral setation directed posteriad but in outer posterior



Figs 107–111: *Thinodromus obscurus*: (107) male sternite VIII; (108) male tergite X; (109) aedeagus, frontal view; (110) median lobe, lateral view; (111) left paramere, lateral view, magnified (1.5 ×). Scale bar = 0.1 mm (111) 0.15 mm (109–110), 0.17 mm (108), 0.18 mm (107).

corners turning postero-laterad, side with a few stronger but short setae, rather inconspicuous. Abdominal tergites apically with longer, postero-mediad directed setae. Primary and secondary sexual features. Male sternite VIII as in Fig. 107, male tergite X as in Fig. 108. Aedeagus as in Figs 109–111. Spermatheca as in Fig. 162.

Distribution and bionomics. This species is known from both Argentina and Chile, between latitudes 32–40° South. It appears to be confined to higher elevations but there rather common in grass at edges of melting snowpatches, in streambank debris (mostly at higher altitudes but occasionally lower ones as well).

Comment. The name *Homalotrichus obscurus* SOLIER, 1849 is preoccupied by *Carpelimus obscurus* STEPHENS, 1834, but as the two taxa do not belong to the same genus as suggested by HERMAN (2001a) it is not necessary to rename the junior synonym. The type locality is given as "Valdivia, San Carlos and the Cordilleras at Elqui". Although a series of "*Trogophloeus obscurus*" specimens with "Ex-Typis" labels exist in ISNB, they cannot be recognized as syntypes, because the locality data do not match any of those given in the description. Due to the poorly labelled material with questionable identities, it was decided that only a newly designated neotype can fix the identity of the taxon satisfactorily. The type series of "*Trogophloeus mersus*" were not labelled according to locality by the authors. Their specimens had event numbers (233 and 247), the meaning of which was only known to them and now lost. The description suggests that specimens were taken at more than one place, but in both cases at high elevation (3300 and 3600 m). Later owners (Fauvel and Fry) in the absence of the key to these numbers, labelled the specimens as "Chili". These circumstances also suggest that a neotype designation for the senior name is preferable. The selected specimen is from Mina La Disputada (= Mina Los Bronces at 3250 m), as both descriptions refer to high elevation localities.

Thinodromus puncticollis (SOLIER, 1849)

(Figs 8, 112–116, 163)

Teropalpus puncticollis SOLIER, 1849: 332.
Trogophloeus puncticollis: KRAATZ, 1859: 7.
Trogophloeus (*Carpalimus*) *puncticollis*: BERNHAUER & SCHUBERT, 1911: 96 (as a synonym of *T. obscurus*).
Trogophloeus (*Paracarpalimus*) *puncticollis*: COIFFAIT & SÁIZ, 1968: 440.
Thinodromus puncticollis: HERMAN, 1970: 387, HERMAN, 2001b: 1773.

Type material. Lectotype ♀: "Chili; [las bajas cordilleras de] Coquimbo \ puncticollis; Sol. type \ Coll. et det. A. Fauvel; T. obscurus; Sol.; R. I. Sc. N. B. 17479 \ Type \ puncticollis Sol.; det Coiff – Saiz 1965 [framed] \ Lectotypus; Teropalpus; puncticollis Solier; ver. Makranczy, 2002 \ Thinodromus; puncticollis Solier; det. Makranczy, 2002" (ISNB).

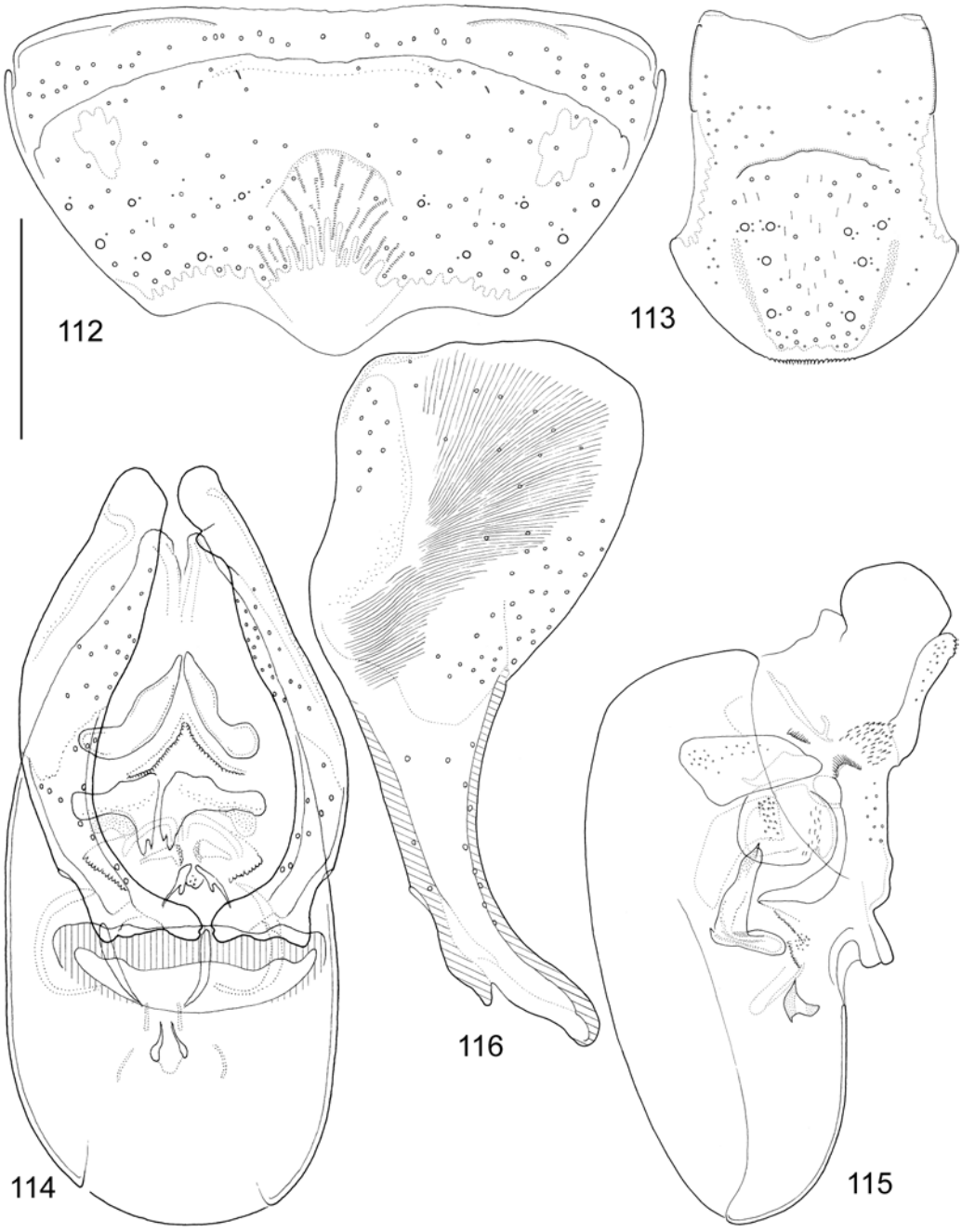
Additional material. ARGENTINA: Mendoza, Andes ca. 10 km W Uspallata, Puente de los Incas, ca. 2200 m [32°35'30"S 69°28'20"W], 5.III.2002, leg. R. Beutel (1, FMNH).

CHILE: Elqui prov., Embalse La Laguna [30°12.0'S 70°02.5'W], 29.X.1995, leg. J.E. Barriga-Tuñón (3, MZUF, 1 ♂, 1 ♀, NHMW); Los Andes prov., Portillo, 48 km E Los Andes, 2683 m, 32°50.940'S 70°08.516'W, 14.I.2006, leg. M. Schülke (10), Schneefeldrand unter Steinen (2, coll. Schülke, ZMHB, 1, NHMW); Los Andes prov., Caracoles, between customs station and pass, 3200–4000 m [32°50.0'S 70°04.5'W], 21.XI.1968, leg. H. Franz (Sa 204), sifted from rubble[?illegible] and grass at snow patches (2 ♀, 15, NHMW, 1 ♂, AMNH, 1 ♂, BMNH, 1, MHNG, 1, NMPC, 1 ♂, ZMUC).

Redescription. Measurements (in mm, n = 10): HW = 0.54 (0.49–0.57); TW = 0.53 (0.48–0.57); PW = 0.58 (0.52–0.63); SW = 0.77 (0.70–0.82); AW = 0.82 (0.75–0.89); HL = 0.40 (0.36–0.42); EL = 0.16 (0.15–0.17); TL = 0.13 (0.11–0.14); PL = 0.46 (0.43–0.49); SL = 0.89 (0.80–0.96); SC = 0.86 (0.77–0.93); FB = 1.77 (1.62–1.89); BL = 3.44 (3.14–3.79). Habitus as in Fig. 8. Lustre and colour. Body weakly lustrous, punctation with significant interspaces but densely miscrosculptured thus of greasy lustre. Pitch black, even apices of tibiae and tarsi very dark, almost black. Shape and sculpture. Head with prominent supraantennal tubercles and arcuate longitudinal impressions mediad, eyes about as long as temples, latter imperfectly rounded, bulging. Neck delineated with occipital groove, vertex before neck unimpressed. Antennae with middle segments a third longer than broad, penultimate articles about as long as broad. Pronotum with anterior corners very slightly protruding, sides very gently arcuate somewhat angled at anterior 2/5, posteriorly straight; midline slightly elevated (mostly in posterior half), impressions at its base, posteriorly bordered by arcuately elevated ridge (often reduced to knoblike, shinier elevations before posterior edge); besides middle of midline also two shallow impressions, laterally bordered by small knoblike (shinier) elevations; near middle of pronotal side feebly impressed. Elytra rather parallel-sided, apically more or less straight but slightly oblique with thin marginal bead, in outer half with inconspicuous membranous lobe; surface rather even, with shallow, oblique impressions from shoulder in anterior third of disc. Apex of abdominal tergite VII with medially somewhat broader palisade fringe. Punctation and microsculpture. Clypeus with fine but dense coriaceous microsculpture, epistomal suture as a shinier stripe. Head and pronotum medium strongly punctate, average puncture interspaces about as puncture diameters; dense coriaceous microsculpture in depressions, insignificantly fading and shinier on elevated parts (with loosened punctation). Neck with fine coriaceous microsculpture (slightly transverse cells), as shiny as rest of head. Elytra with slightly stronger punctation than on head, about the same strength but more even than pronotum, puncture interspaces little less than puncture diameters, traces of coriaceous microsculpture, stronger ruggedness only in two impressions behind scutellum. Abdomen with fine but strong, slightly transverse coriaceous microsculpture (causing greasy lustre), sparse and very fine punctation, average interspaces at least 4 × puncture diameters. Pubescence. Body setation short and sparse, except a stronger bristle near anterior pronotal corner and another at 3/5 length of side. Elytral setation directed posteriad but in outer posterior corners turning postero-laterad, side with a few stronger but short setae, rather inconspicuous. Abdominal tergites apically with longer, postero-mediad directed setae. Primary and secondary sexual features. Male sternite VIII as in Fig. 112, male tergite X as in Fig. 113. Aedeagus as in Figs 114–116. Spermatheca as in Fig. 163.

Distribution and bionomics. This species is known from both Argentina and Chile, between latitudes 29–33° South. The species was found under stones at melting snow and sifted from grass at snow patches.

Comment. By mentioning a single type in the Fauvel collection (ISNB) Coiffait & Sáiz (1968) designated a lectotype (ICZN Art. 74.6). The specimen they did not dissect (and illustrate) bears their label and has turned out to be a female.



Figs 112–116: *Thinodromus puncticollis*: (112) male sternite VIII; (113) male tergite X; (114) aedeagus, frontal view; (115) median lobe, lateral view; (116) left paramere, lateral view, magnified (1.5 ×). Scale bar = 0.1 mm (116) 0.15 mm (114–115), 0.19 mm (113), 0.22 mm (112).

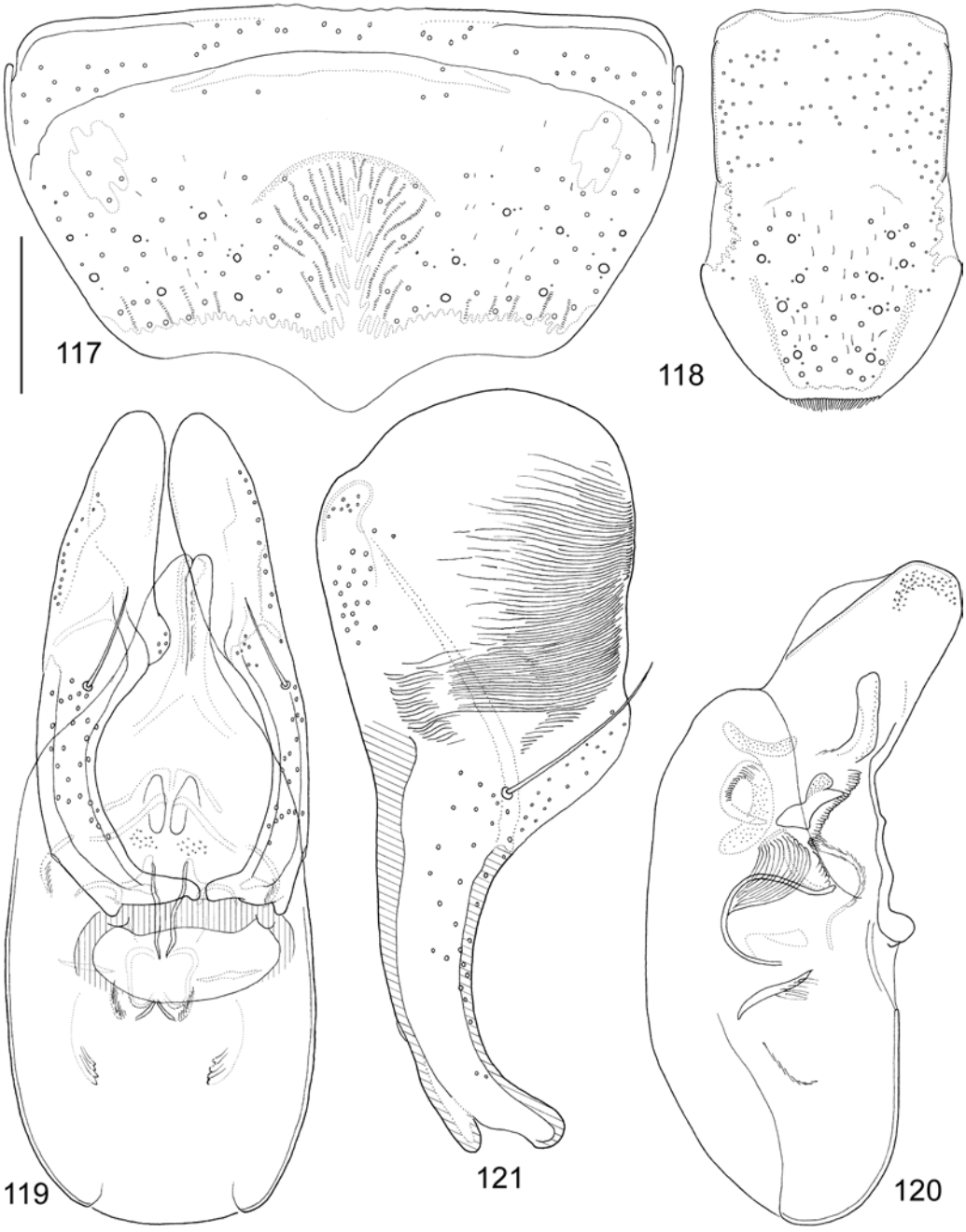
Thinodromus saizi sp.n.
(Figs 63, 117–121)

Type locality. Chile, Malleco prov., 6 km ENE Malalcahuello, 38°26'44"S 71°31'13"W, 1190 m.

Type material. Holotype ♂: "CHILE: Malleco prov. 8.8 km. [on road]; E Malalcahuello, 1190 m. [approx. 38°27'S 71°31'W]; 31.XII.1982, [open area,] flood debris; small forest-edge stream; [leg.] A. Newton & M. Thayer Colls [ANMT 651.2]" (AMNH). **Paratypes** (9): Ñuble prov., Cordillera de Chillán, Las Termas de Chillán [36°54'S 71°31'W], 2−16.II.1978, G. Moreno (1 ♀, 1, AMNH, 1 ♂, NMPC); Osorno prov., Aguas Calientes, Río Chanleufu, 40.740°S 72.300°W, 14.XII.2013, leg. T. Struyve, car-net (2 ♂, coll. Struyve, 1 ♂, BMNH, 1 ♂, NHMW); Osorno prov., Puyehue Nat. Pk., Antillanca Rd., 500–1000 m [40°46.0'S 72°17.5'W], 18–20.XII.1984, leg. S. & J. Peck (FMHD#85-923), carnetting (P#85-38) (2 ♂, FMNH).

Differential diagnosis. Doubtlessly related to *Th. magnipennis* as the transversal ridge on tergite X is absent in both but the new species is smaller (PW < 0.58 mm) and its colouration brighter.

Description. Measurements (in mm, n = 10): HW = 0.64 (0.61–0.67); TW = 0.60 (0.58–0.63); PW = 0.67 (0.64–0.69); SW = 0.92 (0.88–0.97); AW = 0.98 (0.94–1.02); HL = 0.45 (0.43–0.47); EL = 0.22 (0.20–0.24); TL = 0.10 (0.10–0.11); PL = 0.60 (0.57–0.64); SL = 1.08 (1.00–1.15); SC = 1.05 (0.97–1.12); FB = 2.17 (2.05–2.30); BL = 4.14 (3.88–4.46). Habitus as in Fig. 63. Lustre and colour. Body weakly lustrous for the most part, punctation mostly fine but interspaces strongly microsculptured, elytra more roughly punctured with shinier interspaces. Head, pronotum, abdomen, mouthparts and antennae blackish dark brown, legs reddish medium to dark brown. Elytra dark brown in inverse triangular shape broadly around scutellum, rather abruptly turning yellowish-reddish outside this area. Shape and sculpture. Head with prominent supraantennal tubercles and arcuate longitudinal impressions mediad, eyes a third longer than temples, latter imperfectly rounded, slightly bulging. Neck delineated with occipital groove, vertex before neck impressed. Antennae with middle segments a third longer than broad, penultimate articles about as long as broad. Pronotum with anterior corners barely marked and obtuse-angled, sides gently arcuate in anterior half, slightly concave in posterior half; midline elevated, disc strongly impressed (and dull from microsculpture) at the sides of posterior part, posteriorly bordered by arcuately elevated ridge; besides anterior midline two small elevations. Elytra slightly dilating posteriorly, apically with thin marginal bead, moderately arched, in outer half with membranous lobe; surface appearing very even and convex, only with the regular impressions behind scutellum. Apex of abdominal tergite VII with medially broader palisade fringe. Punctation and microsculpture. Clypeus with fine and dense colliculate microsculpture, epistomal suture as a shiny stripe. Head and pronotum medium finely and unevenly punctate, average interspaces about as puncture diameters; coriaceous microsculpture somewhat fading on elevations, but in between stronger, especially in impressions along middle of pronotal side, and on both sides of posterior 1/4 of pronotal midline, where almost imbricate, making surface dull. Neck with fine coriaceous microsculpture (slightly transverse cells) about as shiny as rest of head. Elytra with slightly stronger and more even punctation, puncture interspaces a little less than puncture diameters, traces of coriaceous microsculpture, ruggedness only in two impressions behind scutellum. Abdomen with slightly transverse coriaceous microsculpture, very finely, medium densely punctate, average interspaces 3−4 × puncture diameters. Pubescence. Body setation very short and sparse, pronotum and



Figs 117–121: *Thinodromus saizi* sp.n.: (117) male sternite VIII; (118) male tergite X; (119) aedeagus, frontal view; (120) median lobe, lateral view; (121) left paramere, lateral view, magnified (1.5 ×). Scale bar = 0.1 mm (121) 0.15 mm (119–120), 0.16 mm (118), 0.18 mm (117).

elytra without conspicuously stronger setae. Elytral setation directed posteriad but in outer posterior corners turning postero-laterad. Abdominal tergites apically with longer, postero-mediad directed setae. Primary and secondary sexual features. Male sternite VIII as in Fig. 117, male tergite X as in Fig. 118. Aedeagus as in Figs 119–121.

Distribution and bionomics. This species is known only from Chile, between latitudes 36–41° South. It was found in flood debris of small forest-edge stream and in car-net samples.

Etymology. The species is named after Francisco Sáiz Gutiérrez at the Universidad Católica de Valparaíso, who enormously advanced the knowledge of staphylinids in Chile and produced excellent illustrations way ahead of their time.

Thinodromus schwabei (Bernhauer, 1939)
(Figs 68, 122–126)

Trogophloeus (*Paracarpalimus*) *schwabei* Bernhauer, 1939: 12; Coiffait & Sáiz, 1968: 443.
Trogophloeus (*Stenoderophloeus*) *guttifer* Scheerpeltz, 1972: 66, **syn.n.**
Carpelimus schwabei: Herman, 1970: 393, Herman, 2001b: 1699. (erroneous generic assignment)

Studied type material. *Trogophloeus schwabei* – **Lectotype** ♂ (by present designation): "Puerto Puyuhuapi [Aysén prov., 44°19'20"S 72°33'20"W]; Süd-Chile; leg. H. Schwabe \ 5.I.[19]38. \ Trogophloeus; Schwabei Brnh; Typ. \ Bernhauer det. \ Syntypus [red label] \ Lectotypus; Trogophloeus; schwabei Bernhauer; des. Makranczy, 2000 \ Thinodromus; schwabei; Brnh. 1996; det. M. Gildenkov" (FMNH); **Paralectotypes** (3): "Puerto Puyuhuapi; Süd-Chile; leg. H. Schwabe \ 5.I.[19]38. \ Schwabei Brh; Typ. \ Schwabei; Brnh. Typus; Paracarpalimus [beige label] \ Chicago NHMus; M. Bernhauer; Collection \ Paralectotypus; Trogophloeus; schwabei Bernhauer; des. Makranczy, 2000 \ Thinodromus; schwabei (Bernhauer); det. Makranczy, 2000" (1 ♀, FMNH); "Puerto Puyuhuapi; Süd-Chile; leg. H. Schwabe \ 5.I.[19]38. \ Bernhauer det. \ Syntypus [red label] \ Paralectotypus; Trogophloeus; schwabei Bernhauer; des. Makranczy, 2000 \ Thinodromus; schwabei; Brnh. 1996; det. M. Gildenkov" (1 ♀, 1, SDEI).

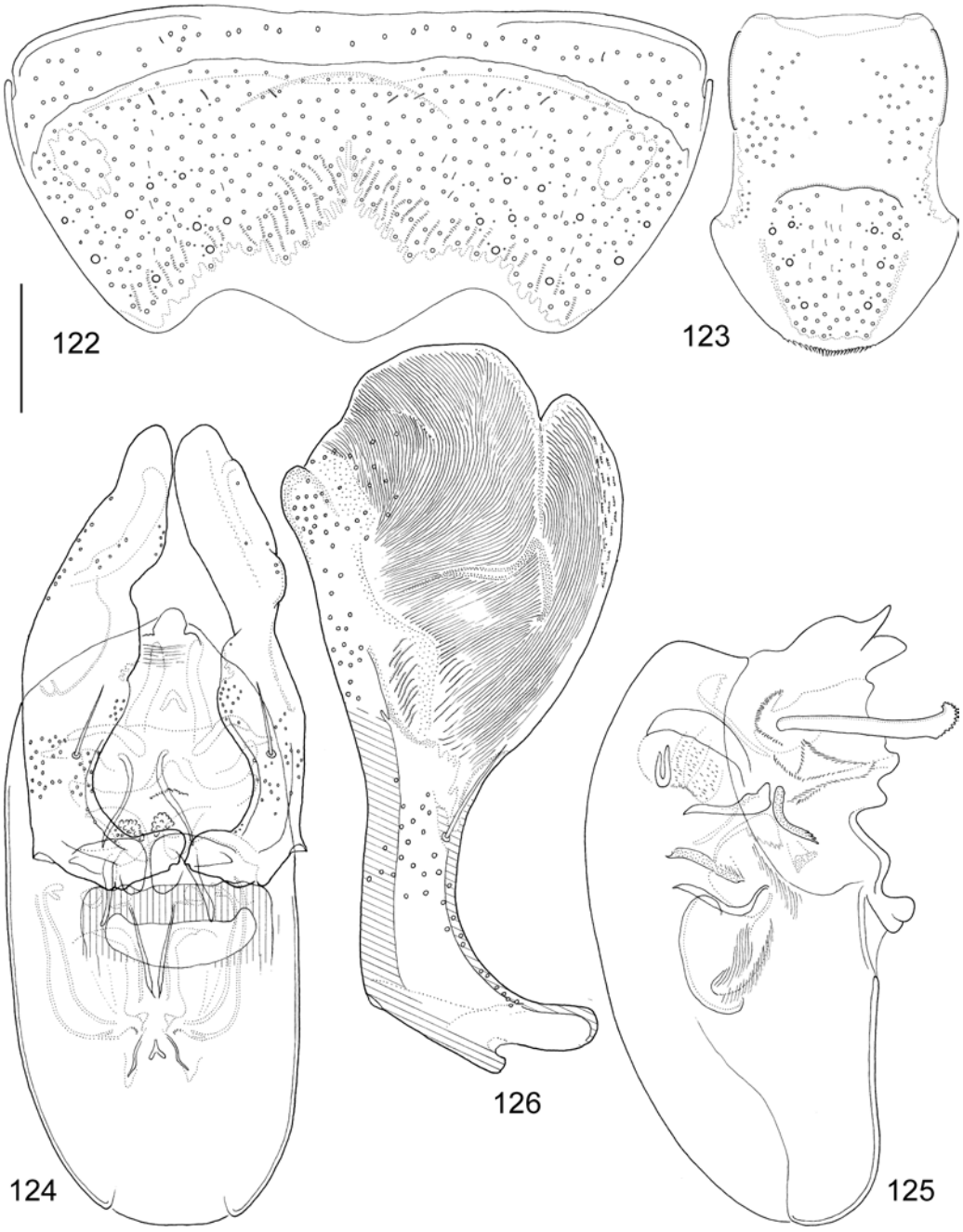
Trogophloeus guttifer – **Holotype** ♀: "S. Arg. Rio Negro; El Bolson, Topál \ Nr. 621; 13.X.[19]61 [350 m, einzeln unter Steinen und auf Schlamm beim stehenden Wasser des Rio Quemquemtreu] \ Foto [pink label] \ Typus; Trogophloeus; guttifer; O. Scheerpeltz [dark red card] \ Holotypus [red label] \ Trogophloeus; (Stenoderophloeus); guttifer; n. sp.; det. Scheerpeltz, 1965 \ Holotypus [in red] 1972; Trogophloeus; (Stenoderophloeus); guttifer; Scheerpeltz [red framed label] \ Thinodromus; schwabei (Bernhauer); det. Makranczy, 2015" (HNHM).

Additional material. ARGENTINA: Neuquén: Pilolil, Río Alumine [39°36'10"S 70°56'20"W] (1, AMNH); Chubut, S El Bolsón, Lago Puelo, 220 m [42°05'S 71°37'W], 18.XI.1978, leg. Mision Cientifica Danesa (E. Nielsen & al.) (13) (1, ZMUC); Chubut, El Bolsón, Lago Puelo, 250 m [42°09'35"S 71°35'40"W], 22–23.X.1981, leg. E. Nielsen & O. Karsholt (30) (2, ZMUC).

CHILE: Colchagua prov., Puente Negro, Río Tinguiririca, 34.677°S 70.871°W, 1.XII.2013, leg. T. Struyve, large river with huge gravel banks, leafpacks sifted (1, coll. Struyve); Ñuble prov., 8 km E Chillán [36°38.5'S 71°59.5'W], 24.X.1969, leg. G. Barria (1, AMNH); Ñuble prov., Los Pellines (Hacienda), 6 km N Recinto, Río Chillán [36°47'50"S 71°40'40"W], 2.XII.1951, leg. L.E. Peña (4, NHMW); Cautín prov., 80 km E Temuco, 3 km E Melipeuco, 38°49.95'S 71°39.70'W, 600 m, river right bank, 7.XII.1999, leg. V.I. Gusarov (1146), under stones, in moss and flood refuse (35, ZMUN, 1 ♂, SEMC); Valdivia prov., 37 km SE Panguipulli, Lago Panguipulli, 39°45'S 72°20'W, 300 m, 14.XI.1994, leg. S. Oygur (1, AMNH); Osorno prov., P.N. Puyehue, Aguas Calientes, 470 m [40°44'S 72°18'W], 17–26.XII.1982, leg. A. Newton & M. Thayer (ANMT 659.4), Valdivian rainforest, at UV blacklight (27, AMNH, 1 ♂, ISNB, 1 ♂, ZMHB); Osorno prov., Aguas Calientes, Lago el Encanto – Toro, 40.74°S 72.30°W, 13.XII.2013, leg. T. Struyve, car-net (40.735°S–72.310°W to 40.780°S–72.239°W) (1, coll. Struyve); Osorno prov., Aguas Calientes, Río Chanleufu, 40.740°S 72.300°W, 14.XII.2013, leg. T. Struyve, small stream with litter trapped by roots at water (1, coll. Struyve); Osorno prov., 7.7 km NE Termas de Puyehue, 200 m [40°40.2'S 72°16.4'W], 19–25[23].XII.1982, leg. A. Newton & M. Thayer (ANMT 664), Valdivian rainforest, on & under wet rocks

at stream (most oxytelines on algae on log) (9, AMNH, 1 ♂, 1 ♀, BMNH, 1 ♂, 1 ♀, NMPC); Osorno prov. Puyehue N.P., Gol Gol bridge 1, 40°40.002'S 72°10.552'W, 106 m, left bank of Río Gol Gol, 3.I.2014, leg. L. Toledano, R. Olivieri & R. Jarpa Lelva (2, MHNG); Osorno prov. Parque Nacional Puyehue, Anticura [40°40.0'S 72°10.5'W], 350 m, 19.XI.1981, leg. E. Nielsen & O. Karsholt (13) (1, ZMUC); Llanquihue prov., 11.5 km N Casa Pangue, 41°03'S 71°52'W, 16.XI.1966, leg. E.I. Schlinger & M.E. Irwin (1, CASC); Chiloé prov., Isla Chiloé, Cruce a Chonchi [42°40.0'S 73°48.5'W], 31.I.1983, leg. T. Čekalović (1, AMNH); Chiloé prov., Isla Chiloé, Lago Huillinco [42°39.5'S 73°55.0'W], 9.II.1981, leg. T. Čekalović (1, AMNH); Aysén prov., Parque Nat. (Reserva Nacional) Río Simpson, Cascada de la Virgen [45°27.5'S 72°22.5'W], 23.X.1968, leg. H. Franz (Sa 161), Bosque Valdiviano [Valdivian temperate rain forest], S-slope, Braunerde [brown soil] with bamboo, sifted from forest litter, mostly bamboo, but also moss (8, NHMW).

Redescription. Measurements (in mm, n = 10): HW = 0.69 (0.66–0.73); TW = 0.62 (0.59–0.66); PW = 0.67 (0.63–0.73); SW = 1.08 (1.02–1.17); AW = 1.00 (0.95–1.06); HL = 0.47 (0.45–0.50); EL = 0.25 (0.23–0.26); TL = 0.10 (0.09–0.11); PL = 0.63 (0.60–0.68); SL = 1.42 (1.31–1.50); SC = 1.39 (1.28–1.47); FB = 2.55 (2.42–2.70); BL = 4.56 (4.39–4.75). Habitus as in Fig. 68. Lustre and colour. Weakly lustrous, body covered with fine and dense punctation and microsculpture, only a few shinier "knobs" on pronotum. Body blackish dark brown with exception of a reddish area most prominent in posterior middle of elytral disc but often larger and onto elytral sides as well. Mouthparts and antennae dark brown, legs somewhat reddish dark brown. Shape and sculpture. Head with prominent supraantennal tubercles and arcuate longitudinal impressions mediad, eyes twice as long as temples, latter perfectly rounded, slightly bulging. Neck delineated with occipital groove, vertex before neck with shallow impression. Antennae with middle segments almost twice as long as broad, penultimate articles about as long as broad. Pronotum with anterior corners almost completely absent, from dorsal view rounded with anterior half of sides, posterior half concave; midline minutely impressed anteriorly and elevated in posterior half, disc strongly impressed at the sides of posterior part, posteriorly bordered by arcuately elevated ridge; at the sides of middle of midline two longitudinal elevations, between them shallowly impressed. Elytra rather parallel-sided, apically with thin marginal bead, in inner half straight and oblique in outer half strongly arched, there with membranous lobe; surface rather even with insignificant impressions behind shoulders. Apex of abdominal tergite VII with medially broader palisade fringe. Punctation and microsculpture. Clypeus with fine and dense colliculate microsculpture, rather dull, epistomal suture as a shiny stripe. Head and pronotum medium finely and unevenly punctate, average interspaces about half as puncture diameters, coriaceous microsculpture somewhat fading on elevations, but in between stronger, especially in impressions along middle of pronotal side, and on both sides of posterior 1/4 of pronotal midline, where almost imbricate, making surface dull. Neck with fine coriaceous microsculpture (slightly transverse cells), less shiny than rest of head. Elytra with more even punctation, fine and dense, puncture interspaces just a little less than puncture diameters, traces of coriaceous microsculpture, slight ruggedness in two impressions behind scutellum. Abdomen with slightly transverse coriaceous microsculpture, very finely, medium densely punctate, average interspaces 2–3 × puncture diameters. Pubescence. Body setation very short and dense but very fine, except stronger bristles near anterior pronotal corner and near mid-length of side. Elytral setation directed posteriad but in outer posterior corners turning postero-laterad, side without conspicuously stronger setae. Abdominal tergites apically with longer, postero-mediad directed setae. Primary and secondary sexual features. Male sternite VIII as in Fig. 122, male tergite X as in Fig. 123. Aedeagus as in Figs 124–126.



Figs 122–126: *Thinodromus schwabei*: (122) male sternite VIII; (123) male tergite X; (124) aedeagus, frontal view; (125) median lobe, lateral view; (126) left paramere, lateral view, magnified (1.5 ×). Scale bar = 0.1 mm (126) 0.15 mm (124–125), 0.16 mm (122), 0.17 mm (123).

Distribution and bionomics. This species is known from both Argentina and Chile, between latitudes 34–46° South. It lives in leafpacks on gravel heaps, mossy stones and flood debris (e. g. algous wood) both at rivers and smaller streams besides being frequently captured in flight and at light sources.

Comment. This is an extremely variable species, mostly in colour and size. The peculiarly elongate elytra and the comparatively small (less wide) pronotum make it recognizable in most cases.

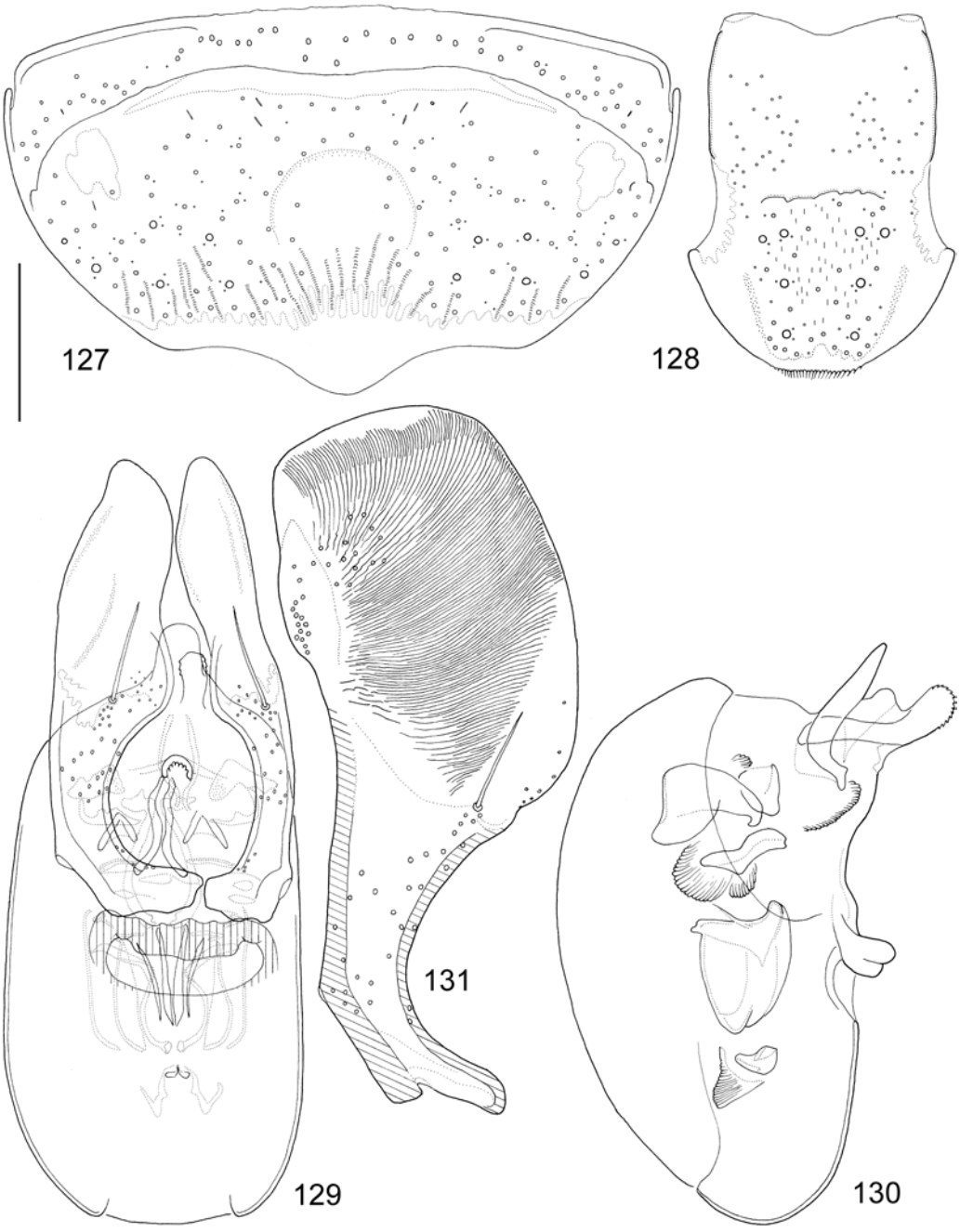
Thinodromus signatoides (SCHEERPELTZ, 1972)
(Figs 70, 127–131, 164)

Trogophloeus (*Trogophloeus*) *signatoides* SCHEERPELTZ, 1972: 69.
Carpelimus signatoides: HERMAN, 2001: 1701. (erroneous generic assignment)

Type material. Holotype ♀: "S. Arg. Rio Negro; El Bolson, Topál \ Nr. 79; 10.VI.[19]61 [W slopes of Mt. Piltriquitron, 720 m, moosige, von Farnen besetzte, reichlich bewässerte Wiese, Moosproben aus einem Bachbett] \ Foto [pink label] \ Typus; Trogophloeus; signatoides; O. Scheerpeltz [dark red card] \ Holotypus [red label] \ Trogophloeus; signatoides; n. sp.; det. Scheerpeltz, 1965 \ Holotypus [in red] 1972; Trogophloeus; signatoides; Scheerpeltz [red framed label] \ Thinodromus; signatoides (Scheerpeltz); det. Makranczy, 2015" (HNHM). **Paratype** (1): "S. Arg. Rio Negro; El Bolson, Topál \ Nr. 79; 10.VI.[19]61 \ ex coll.; Scheerpeltz [light blue label] \ Cotypus; Trogophloeus; signatoides; O. Scheerpeltz [pink card] \ signatoides; Scheerp. [light green card] \ Paratypus; Trogophloeus; signatoides Scheerp.; ver. Makranczy, 2015 \ Thinodromus; signatoides (Scheerpeltz); det. Makranczy, 2015" (1 ♀, NHMW).

Additional material. **CHILE:** Valdivia prov., Cayumapu, Río Cayumapu, 39.724°S 73.107°W, 6.XII.2013, leg. T. Struyve, river bank (4, coll. Struyve, 1 ♂, 1 ♀, BMNH, 1 ♂, 1 ♀, NHMW); Osorno prov., Aguas Calientes, Río Chanleufu, 40.740°S 72.300°W, 14.XII.2013, leg. T. Struyve, small stream with litter trapped by roots at water (1 ♀, coll. Struyve).

Redescription. Measurements (in mm, n = 10): HW = 0.63 (0.60–0.65); TW = 0.59 (0.57–0.61); PW = 0.63 (0.60–0.66); SW = 0.83 (0.79–0.87); AW = 0.95 (0.85–1.01); HL = 0.44 (0.42–0.46); EL = 0.20 (0.19–0.21); TL = 0.11 (0.10–0.12); PL = 0.55 (0.51–0.57); SL = 0.98 (0.95–1.01); SC = 0.95 (0.92–0.98); FB = 2.01 (1.93–2.05); BL = 4.04 (3.82–4.23). Habitus as in Fig. 70. Lustre and colour. Body moderately lustrous, punctation interspaces rather shiny on elytra, more elevated parts of pronotum also with loosened microsculpture. Blackish dark brown, except small reddish spot on elytra near posterior 3/4 of suture (sometimes faint, almost vanishing). Mouthparts and whole antennae dark brown, legs reddish medium to dark brown. Shape and sculpture. Head with prominent supraantennal tubercles and arcuate longitudinal impressions mediad, eyes a third longer than temples, latter perfectly rounded, slightly bulging. Neck delineated with occipital groove, vertex before neck impressed. Antennae with middle segments almost twice as long as broad, penultimate articles slightly elongate. Pronotum with anterior corners obtuse-angled and barely noticeable, sides arcuate in anterior half, concave in posterior half; midline elevated in posterior half, strong impressions at its sides, posteriorly bordered by arcuately elevated ridge; besides middle of midline also two gentle impressions; near middle of pronotal side strongly impressed. Elytra slightly dilating posteriorly, apically with thin marginal bead, in inner half straight and oblique, in outer half strongly arched, there with membranous lobe; surface rather even, with shallow oblique impressions from shoulder to middle of disc. Apex of abdominal tergite VII with medially broader palisade fringe. Punctation and microsculpture. Clypeus with fine but rather strong coriaceous microsculpture, epistomal suture as a transversal wrinkle.



Figs 127–131: *Thinodromus signatoides*: (127) male sternite VIII; (128) male tergite X; (129) aedeagus, frontal view; (130) median lobe, lateral view; (131) left paramere, lateral view, magnified (1.5 ×). Scale bar = 0.1 mm (131) 0.15 mm (129–130), 0.16 mm (128), 0.18 mm (127).

Head and pronotum with moderately rough, rather dense punctation (average interspaces about as puncture diameters, but greatly variable), coriaceous microsculpture stronger in depressions, fading on elevated parts, shinier also because of loosening punctation. Neck with fine coriaceous microsculpture (slightly transverse cells), less shiny than rest of head. Elytra with more even but shallow punctation (less distinct borders), puncture interspaces about as puncture diameters, slight ruggedness only in two impressions behind scutellum. Abdomen with very shallow, transverse coriaceous microsculpture, very fine and medium sparse punctation (average interspaces 3–4 × puncture diameters) denser and with stronger microsculpture in antero-lateral corners of tergites. Pubescence. Body setation short and sparse, except stronger bristles near anterior pronotal corner and at 1/3 length of side. Elytral setation directed posteriad but in outer posterior corners turning postero-laterad, side with a few stronger setae (behind shoulder and before mid-length of side). Abdominal tergites apically with longer, postero-mediad directed setae. Primary and secondary sexual features. Male sternite VIII as in Fig. 127, male tergite X as in Fig. 128. Aedeagus as in Figs 129–131. Spermatheca as in Fig. 164.

Distribution and bionomics. This species is known from both Argentina and Chile, between latitudes 39–43° South. It was collected from mossy and ferny lawn abundantly watered in bed of a brook, litter at a small stream and on a river bank.

Comment. The species was described based on two females and its recognition is really difficult. Since the supplementary material is not from the type locality it is still possible that more cryptic species are involved, but the present account demonstrates that there are at least two of them (*Th. franzi* sp.n. is the sibling species).

Thinodromus signatus (ERICHSON, 1834)

(Figs 67, 132–136)

Trogophloeus signatus ERICHSON, 1834: 229; ERICHSON, 1840: 803.
Trogophloeus nitidiventris FAIRMAIRE & GERMAIN, 1861: 447, **syn.n.**
Trogophloeus (*Carpalimus*) *signatus*: BERHNAUER & SCHUBERT, 1911: 96.
Trogophloeus (*Paracarpalimus*) *signatus*: COIFFAIT & SÁIZ, 1968: 440.
Thinodromus signatus: HERMAN, 1970: 387; HERMAN, 2001b: 1774.

Studied type material. *Trogophloeus signatus* – **Lectotype** ♀ (here designated): "6736 \ signatus; Er.; Chile [leg. F.] Meyen \ Hist.-Coll. (Coleoptera); Nr. 6736; Trogophloeus signatus; Erichs.; Chili, Meyen; Zool. Mus. Berlin \ Lectotypus; Trogophloeus; signatus Erichson; des. Makranczy, 2000 \ Thinodromus; signatus Erichson; det. Makranczy, 2000" (ZMHB).

Trogophloeus nitidiventris – **Lectotype** ♂ (here designated): "287 [Santiago, dans les ruisseaux, accrochés sous les pierres] \ Trogophloeus; nitidiventris; nsp. / Coll. et det. A. Fauvel; R. I. Sc. N. B. 17.479 / Lectotypus; Trogophloeus; nitidiventris F. & G.; des. Makranczy, 2000 \ Thinodromus; signatus Erichson; det. Makranczy, 2000" (ISNB); **Paralectotypes** (3): "287 \ Trogophloeus; nitidiventris; nsp. / Coll. et det. A. Fauvel; R. I. Sc. N. B. 17.479 / Paralectotypus; Trogophloeus; nitidiventris F. & G.; des. Makranczy, 2000 \ Thinodromus; signatus Erichson; det. Makranczy, 2000" (3, ISNB).

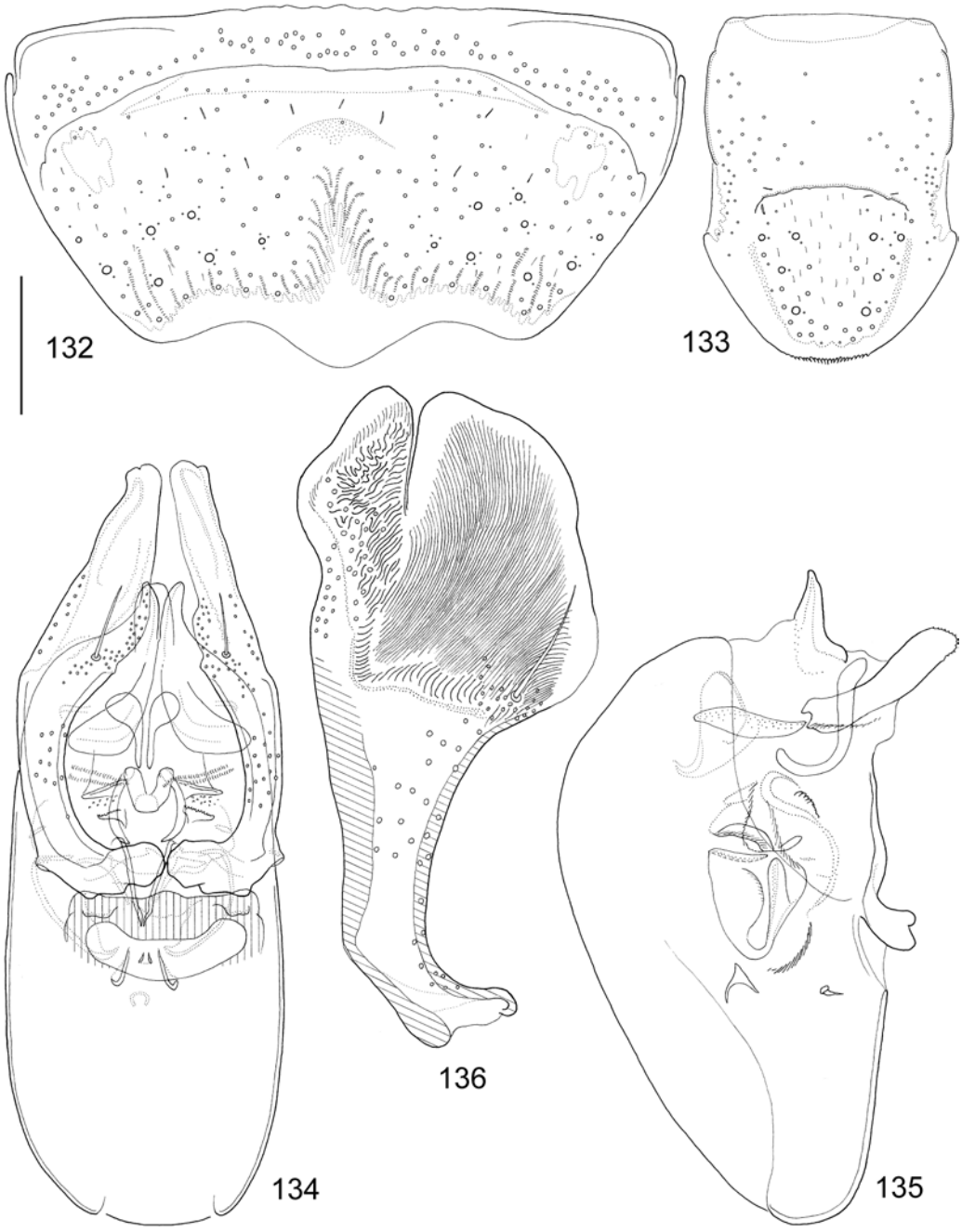
Additional material. CHILE: Valparaiso prov., Quillota, [Cerro] La Campana [= Bell Mtn., 32°58'09"S 71°07'36"W], 23.X.1968, J. Solervicens (1 ♂, NHMW, 1, NMPC); Valparaiso, Bell Mtn. [Cerro La Campana], S-slope, 3000 ft [32°58'09"S 71°07'36"W], 17.XII.1950, leg. E.S. Ross & A.E. Michelbacher (1, CASC); Valparaiso prov., Colliquay, cabana La Retuca [33°08'10"S 71°20'40"W], 5.XI.1963, leg. G.F. Edmunds (1, CASC); Valparaiso prov., Petorca, cuesta El Melón [32°35.5'S 71°14.5'W], 5–28.XI.1985, leg. L.E. Peña (2, FMNH); Quillota prov., 4 km E Quebrada Alvarado, 500 m [33°03'S 71°03'W], 5.I.1983, leg. A. Newton & M. Thayer (ANMT 668.2), gallery forest along stream, stream edge debris, especially among wet leaves (1 ♂, 4, AMNH, 1 ♂, BMNH, 1 ♂, FMNH, 1 ♂, MHNG, 1 ♂, ZMUC); Ñuble prov., 19.5 km

ESE Recinto, Las Trancas, 1250 m [36°54'S 71°28'W], 3.I.1983, leg. A. Newton & M. Thayer (ANMT 647), *Nothofagus* forest, small forest stream, among rocks and flood debris (1, AMNH); Malleco prov., Angol [37°48.0'S 72°43.0'W], 31.XII.1950, leg. E.S. Ross & A.E. Michelbacher (1, CASC).

Redescription. Measurements (in mm, n = 10): HW = 0.71 (0.68–0.74); TW = 0.66 (0.64–0.69); PW = 0.72 (0.68–0.75); SW = 1.00 (0.95–1.05); AW = 1.10 (1.02–1.14); HL = 0.49 (0.47–0.51); EL = 0.23 (0.22–0.24); TL = 0.12 (0.10–0.14); PL = 0.61 (0.58–0.63); SL = 1.12 (1.04–1.22); SC = 1.09 (1.01–1.19); FB = 2.26 (2.15–2.33); BL = 4.40 (3.94–4.59). Habitus as in Fig. 67. Lustre and colour. Body weakly lustrous, surface densely punctate and microsculptured. Dark brown (head and abdomen even blackish), except elongate oval reddish spot on elytra near posterior 3/4 of suture (sometimes radiating onto a larger area). Mouthparts and most of antennae dark brown, legs and basal antennomeres reddish medium to dark brown. Shape and sculpture. Head with prominent supraantennal tubercles and arcuate longitudinal impressions mediad, eyes a third longer than temples, latter perfectly rounded, slightly bulging. Neck delineated with occipital groove, vertex before neck impressed. Antennae with middle segments almost twice as long as broad, penultimate articles slightly elongate. Pronotum with anterior corners obtuse-angled and barely noticeable, sides arcuate in anterior half, concave in posterior half; midline slightly elevated, more strongly posteriorly, interrupted in middle by slight transversal impression, disc strongly, obliquely impressed at the sides of posterior part, posteriorly bordered by arcuately elevated ridge; besides anterior midline two small elevations. Elytra slightly dilating posteriorly, apically with thin marginal bead, in inner half straight and oblique in outer half strongly arched, there with membranous lobe; surface appearing slightly uneven, shallow impressions on anterior disc plus inner half of posterior disc. Apex of abdominal tergite VII with medially broader palisade fringe. Punctation and microsculpture. Clypeus with fine colliculate microsculpture, epistomal suture as a shinier stripe. Head and pronotum with medium fine, very dense punctation (average interspaces about half as puncture diameters), coriaceous microsculpture mostly in depressions, fading on elevated parts, shinier also because of loosening punctation. Neck with fine coriaceous microsculpture (slightly transverse cells), less shiny than rest of head. Elytra with slightly stronger and more even punctation, puncture interspaces somewhat less than puncture diameters, slight ruggedness only in two impressions behind scutellum. Abdomen with shallow, slightly transverse coriaceous microsculpture, very fine and medium sparse punctation (average interspaces 2–3 × puncture diameters) denser and with stronger microsculpture in antero-lateral corners of tergites. Pubescence. Body setation short and sparse, except stronger bristles near anterior pronotal corner and at 1/3 length of side. Elytral setation directed posteriad but in outer posterior corners turning postero-laterad, side with a few stronger setae (behind shoulder and before mid-length of side). Abdominal tergites apically with longer, postero-mediad directed setae. Primary and secondary sexual features. Male sternite VIII as in Fig. 132, male tergite X as in Fig. 133. Aedeagus as in Figs 134–136.

Distribution and bionomics. This species is known only from Chile, between latitudes 32–37° South. Available bionomical notes record it in forests (mostly *Nothofagus*), among rocks and in flood debris (e. g. wet leaves) at stream edges.

Comment. This taxon has been frequently misidentified – simply by being the oldest published name – but is in fact rare and hard to distinguish from closely related species. Often collected together with *Th. impressipennis*, but in much lower numbers.



Figs 132–136: *Thinodromus signatus*: (132) male sternite VIII; (133) male tergite X; (134) aedeagus, frontal view; (135) median lobe, lateral view; (136) left paramere, lateral view, magnified (1.5 ×). Scale bar = 0.1 mm (136) 0.15 mm (134–135), 0.17 mm (133), 0.18 mm (132).

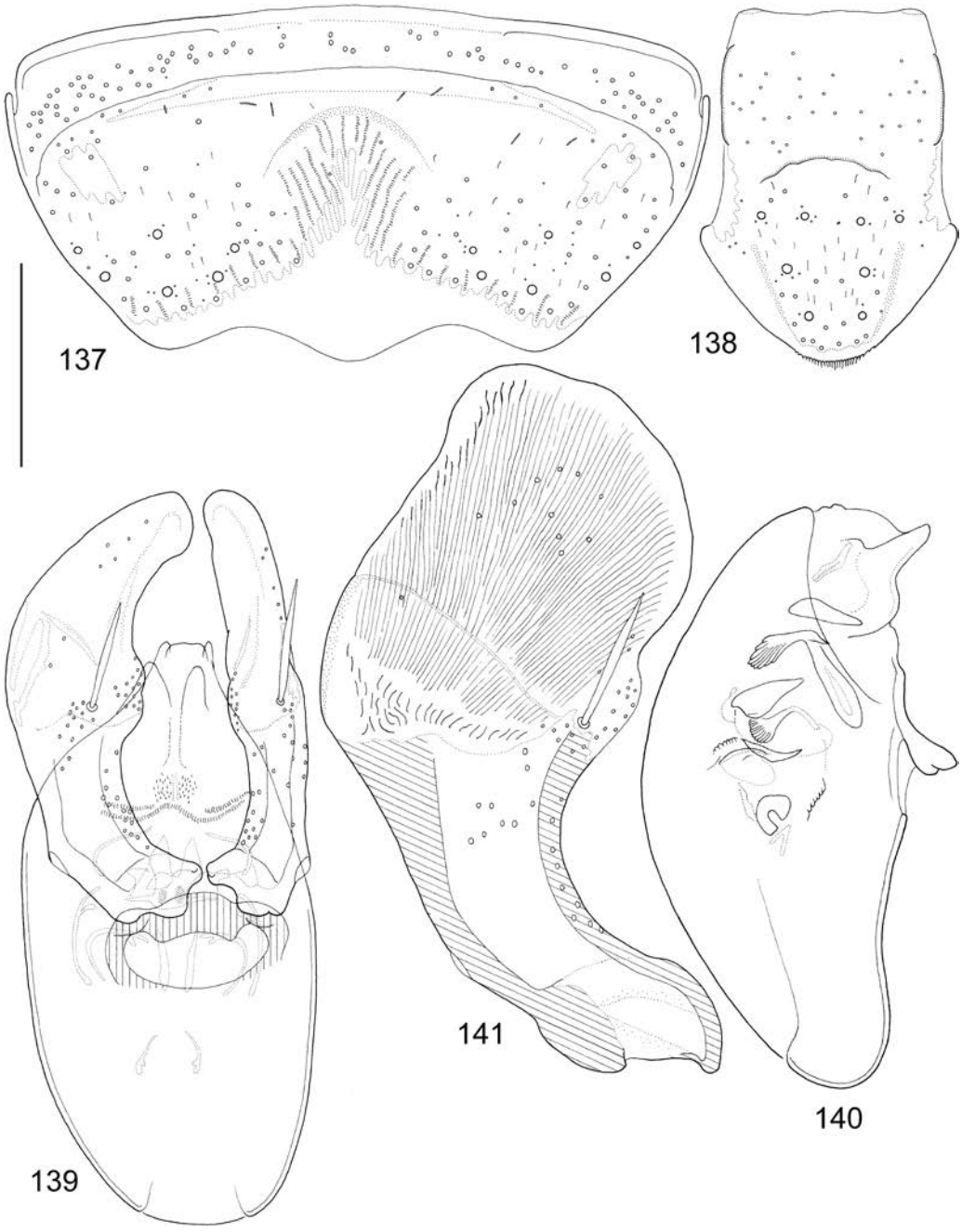
Thinodromus struyvei sp.n.
(Figs 4, 137–141)

Type locality. Chile, Curicó prov., Los Queñes, Río Teno, approx. 35°00.0'S 70°49.5"W, 650 m.

Type material. Holotype ♂: "CHILE: Curicó, Los; Queñes, 6.VII.1967; leg. F. Saiz?, Borde arroyo" (NHMW). **Paratypes** (30): same data as holotype (1 ♀, NHMW); Bio Bio prov., 4 km ESE Alto Bio Bio, Ralco, 37.896°S 71.600°W, 2.XII.2013, leg. T. Struyve, humid litter layer sifted in seepage zone (18, coll. Struyve, 1 ♂, 1 ♀, AMNH, 1 ♂, 1 ♀, BMNH, 1 ♂, 1 ♀, FMNH, 1 ♂, 1 ♀, MHNG, 1 ♂, NMPC, 1 ♂, ZMHB, 1 ♂, ZMUC);.

Differential diagnosis. Similar to *Th. angulicollis*, but distinguishable by the smaller size and the shorter elytra.

Description. Measurements (in mm, n = 10): HW = 0.55 (0.51–0.59); TW = 0.52 (0.48–0.56); PW = 0.57 (0.52–0.62); SW = 0.66 (0.60–0.72); AW = 0.85 (0.77–0.91); HL = 0.40 (0.36–0.43); EL = 0.16 (0.15–0.17); TL = 0.11 (0.10–0.13); PL = 0.52 (0.49–0.55); SL = 0.70 (0.63–0.77); SC = 0.67 (0.60–0.74); FB = 1.65 (1.51–1.75); BL = 3.36 (3.06–3.59). Habitus as in Fig. 4. Lustre and colour. Body moderately lustrous, predominantly punctate and microsculptured, with mostly small puncture interspaces except on elytra where interspaces significant and shiny. Head dark brown, pronotum, elytra and abdomen reddish dark brown (or only occasionally darker), legs, mouthparts and basal antennomeres reddish medium brown, rest of antennomeres dark brown. Shape and sculpture. Head with prominent supraantennal tubercles and arcuate longitudinal impressions mediad, eyes usually only little longer than temples, latter perfectly rounded, somewhat bulging. Neck delineated with occipital groove, vertex before neck longitudinally impressed. Antennae with middle segments rather elongate (about 1.5 × longer than wide, penultimate articles about as long as broad. Pronotum with anterior corners moderately protruding, slightly angled at anterior 1/3 also marked with a small tubercle, arcuate sides slightly concave before obtuse-angled and narrowly rounded posterior corners; midline slightly impressed anteriorly and elevated in posterior half, disc strongly impressed at the sides of posterior 2/3, prebasal impression posteriorly bordered by arcuately elevated ridge, disc moderately depressed in the middle of outer halves. Elytral sides moderately arcuate and dilating rather parallel-sided, apically with thin marginal bead, moderately arched in outer 1/2, there also with membranous lobe; surface rather uneven, impressions from shoulders towards middle of suture plus inner half of posterior disc. Apex of abdominal tergite VII with medially much broader palisade fringe. Punctation and microsculpture. Clypeus with feeble coriaceous microsculpture, epistomal suture inconspicuous but delineating clypeus from vertex without microsculpture. Head and pronotum shiny but punctate, punctures on head deep and more dense, average interspaces much less than puncture diameters. Pronotum with deep punctures, in varying density, on more elevated parts punctures looser and interspaces exceeding puncture diameters. Neck with fine but strong coriaceous microsculpture with very transverse cells, dull. Elytra with slightly stronger and more even punctation, puncture interspaces almost as puncture diameters, slight ruggedness around scutellum. Abdomen with faint and transverse coriaceous microsculpture only near basal ridges, completely fading posteriorly, with fine and sparse punctation smooth apical part. Pubescence. Body setation short and moderately dense, except a stronger bristle near anterior pronotal corner and another at the tubercle at anterior 1/3 of side.



Figs 137–141: *Thinodromus struyvei* sp.n.: (137) male sternite VIII; (138) male tergite X; (139) aedeagus, frontal view; (140) median lobe, lateral view; (141) left paramere, lateral view, magnified (1.5 ×). Scale bar = 0.1 mm (141) 0.15 mm (139–140), 0.19 mm (138), 0.2 mm (137).

Elytral setation directed posteriad but in outer posterior corners turning postero-laterad, side with a few stronger setae. Abdominal tergites apically with longer setae, setation in basolateral corners strongly turning laterad. Primary and secondary sexual features. Male sternite VIII as in Fig. 137, male tergite X as in Fig. 138. Aedeagus as in Figs 139–141.

Distribution and bionomics. This species is known only from Chile, between latitudes 35–38° South. Apparenly it lives both in vegetable debris at streambanks and humid leaflitter layer wetted by seepages in forests.

Etymology. The species is named after Tim Struyve, an amazingly efficient collector using unconventional methods and whose Chilean staphylinid collecting solved many problems in this work. Is is not far from the reality that without those specimens this publication could have turned out much less complete and accurate; two species in the original manuscript were misidentified, interpreted correctly only after seeing Tim's material.

Thinodromus tegens sp.n.
(Figs 66, 142–146, 165)

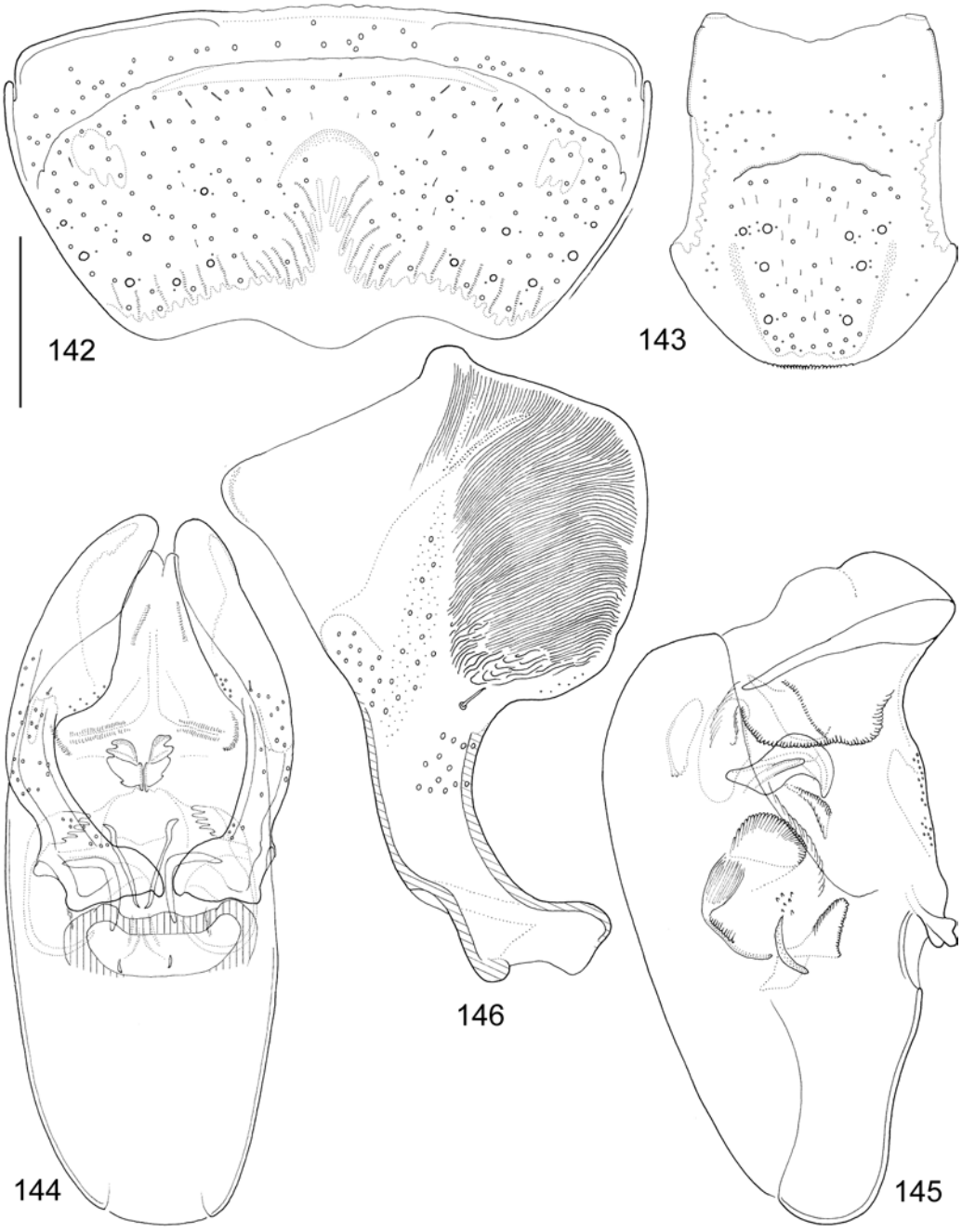
Type locality. Chile, Malleco prov., stream (Río Malleco) flowing into Laguna Malleco, 38°12'57"S 71°48'39"W, 890 m.

Type material. Holotype ♂: "CHILE: Malleco pr.; Parque Nac. Tolhuaca; Lago Malleco, 890 m [38°13'S 71°49'W]; 1.i.1983, disturbed; *Nothofagus* [underlined instead of italics] forest; A. Newton & M. Thayer [ANMT 651.3] \ wet leaves and; flood debris,; forest stream [FMHD#83-887]" (FMNH). **Paratypes** (85): Concepción prov., Estero Ñonguén [36°50'20"S 73°00'20"W], 11.XII.1977, leg. T. Čekalović (1♂, SEMC), same but 24.XII.1979 (2, AMNH); Malleco prov., Parque Nacional Tolhuaca, Lago Malleco, 890 m [38°13'S 71°49'W], disturbed *Nothofagus* forest, 1.I.1983, leg. A. Newton & M. Thayer (ANMT 651.3), wet leaves and flood debris, forest stream (FMHD#83-887) (19, AMNH); Malleco prov., Parque Nacional Tolhuaca, sector Laguna Verde [38°12'40"S 71°44'30"W], 1000–1300 m, 27.I.1996, leg. D. Burckhardt (63a), mixed *Nothofagus* and *Nothofagus*/*Araucaria* forest, sifting of moss and vegetational debris in ravine (1, MHNG); Malleco prov., Puente Las Toscas, 21 km ESE Victoria, 480 m [38°17'S 72°09'W], 14.XII.1982, leg. A. Newton & M. Thayer (ANMT 651.1), disturbed area, small river, flood debris (3, AMNH); Malleco prov., Parque Nac. Contulmo, 10 km W Purén, 240 m [38°01'S 73°11'W], 12.XII.1982, leg. A. Newton & M. Thayer (ANMT 648.3), mixed hardwood forest w/*Chusquea*, wet leaves & flood debris, forest stream (3, AMNH); Cautín prov., 80 km E Temuco, 3 km E Melipeuco, 38°49.95'S 71°39.70'W, 600 m, river right bank, 7.XII.1999, leg. V.I. Gusarov (1146), under stones, in moss and flood refuse (1, ZMUN); Cautín prov., Bellavista, N shore of Lago Villarrica, 310 m [39°12'S 72°08'W], 30.XII.1982, leg. A. Newton & M. Thayer (ANMT 655), Valdivian rainforest, forest stream, Berlese flood debris (FMHD#82-848) (8, AMNH); Osorno prov., Parque Nacional Puyehue, Aguas Calientes, 40°40'S 72°20'W, 400–500 m, 31.XII.1990–1.I.1991, leg. D. Agosti & D. Burckhardt (25a), Valdivian lauriphyllous forest along river, sifting of vegetational and alluvial debris and moss (2, MHNG); Osorno prov., Parque Nacional Puyehue, 3.1 km E Anticura, Salto los Novios, 415 m [40°39.5'S 72°09.0'W], 19.XII.1982, leg. A. Newton & M. Thayer (ANMT 662.1), river flood debris (FMHD#82-853) (1, FMNH, 22, AMNH, 1 ♂, 1 ♀, NHMW, 1 ♂, SEMC, 1 ♂, BMNH, 1 ♂, MHNG, 1 ♂, ZMHB, 1 ♂, ZMUC); Osorno prov., Aguas Calientes, Lago el Encanto – Toro, 40.75°S, 72.30°W, 13.XII.2013, leg. T. Struyve, car-net (40.735°S–72.310°W to 40.780°S–72.239°W) (2, coll. Struyve); Osorno prov., Aguas Calientes, Río Chanleufu, 40.740°S 72.300°W, 14.XII.2013, leg. T. Struyve, small stream with litter trapped by roots at water (1 ♂, 3 ♀, 4, coll. Struyve, 1 ♀, BMNH, 1 ♀, ZMHB, 1♀, ZMUC); Llanquihue prov., Lago Llanquihue, 41°13'25.5"S 72°39'23.0"W, 60 m, stream next to road, 16.XII.2014, leg. I. Ribera (12) (1 ♂, 1, coll. Assing); Llanquihue prov., road EN225 between Puerto Varas and Ensenada, Ponte Rio Pescado, 41°15.216'S 72°47.726'W, 40 m, right bank of Rio Pescado, 6.I.2014, leg. L. Toledano & R. Olivieri (1 ♀, MHNG).

Differential diagnosis. This species can be similar to all those that have more elongate elytra and are spotted (e. g. *Th. toroi* sp.n.) with the spot occasionally weakly visible, but distinguishable by the different pronotal sculpture; by turning the specimen slightly to the side, lateral parts of the pronotum appear fully shagreened and dull or so finely and densely punctate that discrete punctures and shiny interspaces cannot be seen.

Description. Measurements (in mm, n = 10): HW = 0.60 (0.59–0.62); TW = 0.57 (0.55–0.59); PW = 0.62 (0.60–0.65); SW = 0.87 (0.83–0.89); AW = 0.83 (0.77–0.89); HL = 0.42 (0.40–0.44); EL = 0.20 (0.18–0.21); TL = 0.11 (0.10–0.12); PL = 0.56 (0.54–0.59); SL = 1.07 (1.03–1.12); SC = 1.04 (1.00–1.09); FB = 2.09 (2.02–2.17); BL = 3.90 (3.76–3.98). Habitus as in Fig. 66. Lustre and colour. Body weakly lustrous, for less prominent punctation but dense microsculpture, except elytra with more dominant punctation (and less microsculptured interspaces), shinier. Dark brown, often blackish, sometimes with reddish tint (on elytra); mouthparts, legs and antennae also dark brown. Shape and sculpture. Head with prominent supraantennal tubercles and arcuate longitudinal impressions mediad, eyes at least a third longer than temples, latter perfectly rounded, slightly bulging. Neck delineated with occipital groove, vertex before neck impressed. Antennae with middle segments about twice as long as broad, penultimate articles slightly elongate. Pronotum with anterior corners barely noticeable, corners rounded, sides arcuate in anterior half, concave in posterior half; midline slightly impressed anteriorly and elevated in posterior 2/3, disc strongly impressed at the sides of posterior part, posteriorly bordered by arcuately elevated ridge; at the sides of middle of midline two knob-like elevations with obsolete impression between them. Elytra rather parallel-sided, apically with thin marginal bead, in inner half straight and oblique in outer half strongly arched, there with membranous lobe; surface uneven, triangular impressions from shoulders to middle of disc, often extending posteriorly from shoulders. Apex of abdominal tergite VII with medially broader palisade fringe. Punctation and microsculpture. Clypeus with fine-meshed, dense coriaceous microsculpture, making surface almost dull; epistomal suture as a shiny stripe. Head and pronotum punctate, dense coriaceous microsculpture everywhere on surface, even elevated parts with not much loosened punctation and just slightly shinier; in depressions strong coriaceous-colliculate microsculpture dominates, very strongly towards middle of pronotal side. Neck with fine coriaceous microsculpture (slightly transverse cells), but same lustre as rest of head. Elytra with slightly stronger and more even punctation, puncture interspaces a little larger than puncture diameters, some ruggedness behind scutellum with two slight impressions. Abdomen with fine, slightly transverse coriaceous microsculpture, fine punctation getting less pronounced posteriorly, average interspaces about 3 × puncture diameters.
Pubescence. Body setation short and sparse, except stronger bristles near anterior pronotal corner and near 3/5 length of side. Elytral setation directed posteriad but in outer posterior corners turning postero-laterad, side with a few stronger setae (more erect but otherwise inconspicuous). Abdominal tergites apically with longer, postero-mediad directed setae. Primary and secondary sexual features. Male sternite VIII as in Fig. 142, male tergite X as in Fig. 143. Aedeagus as in Figs 144–146. Spermatheca as in Fig. 165.

Distribution and bionomics. This species is known only from Chile, between latitudes 36–42° South, although it appears as a common species and will most likely be found in Argentina as well. Most frequently it was found on riverbanks, characteristically in flood debris (wet leaves), mossy rocks and was also collected with car-net.



Figs 142–146: *Thinodromus tegens* sp.n.: (142) male sternite VIII; (143) male tergite X; (144) aedeagus, frontal view; (145) median lobe, lateral view; (146) left paramere, lateral view, magnified (1.5 ×). Scale bar = 0.1 mm (146) 0.15 mm (144–145), 0.17 mm (143), 0.2 mm (142).

Etymology. The name of the species is a Latin adjective meaning "covering" and referring to the elytra of this species being elongate and often appearing longitudinally wrinkled as a cloak.

Thinodromus topali (SCHEERPELTZ, 1972)

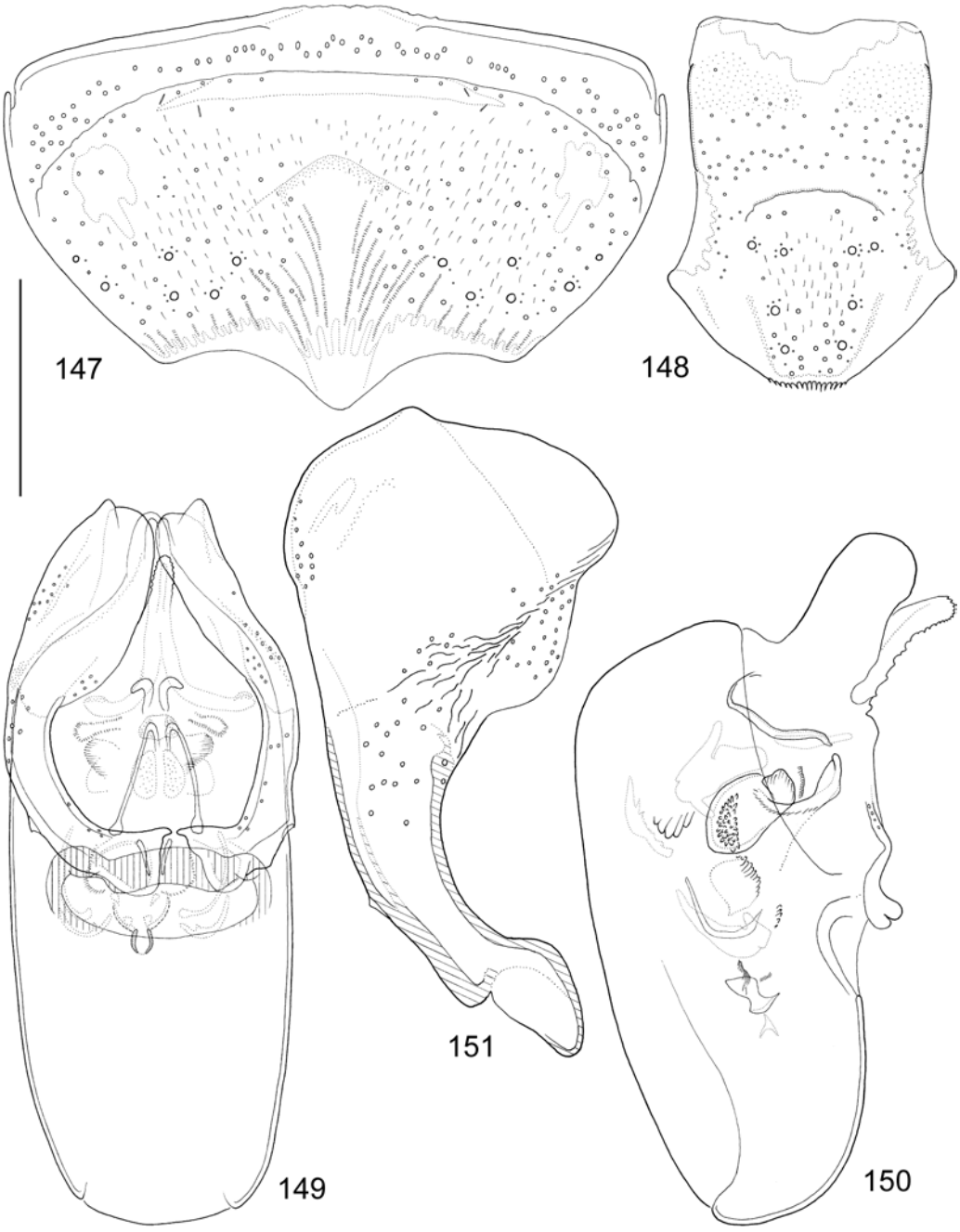
(Figs 10, 147–151)

Trogophloeus (*Trogophloeus*) *topali* SCHEERPELTZ, 1972: 81.
Carpelimus topali: HERMAN, 2001: 1707. (erroneous generic assignment)

Type material. Holotype ♂: "S.Arg.[entina] Rio Negro; El Bolson [Mt. Piltriquitron, 1000 m, approx. 41°58'40"S 71°28'50"W], [Gy.] Topál \ Nr. 10; 16.V.[19]61 [gesiebt aus Gras und Bodenmaterial unter liegenden Baumstämmen auf Weideland] \ Foto [pink label] \ Typus; Trogophloeus; topali; O. Scheerpeltz [dark red card] \ Holotypus [red label] \ Trogophloeus; topali; n. sp.; det. Scheerpeltz, 1965 \ Holotypus [in red] 1972; Trogophloeus; topali; Scheerpeltz \ Thinodromus; topali (Scheerpeltz); det. Makranczy, 2015" (HNHM).

Additional material. ARGENTINA: Neuquén, 16 km (on road) E Rahue, Rt. 46 [39°24.0'S 70°49.5'W, 1200 m], 1.II.1972, leg. L. Herman (909), leaf litter on the moist bank of a stream (1 ♂, AMNH).

Redescription. Measurements (in mm, n = 2): HW = 0.58 (0.58–0.58); TW = 0.55 (0.55–0.55); PW = 0.66 (0.65–0.67); SW = 0.81 (0.80–0.81); AW = 0.90 (0.90–0.90); HL = 0.44 (0.43–0.44); EL = 0.15 (0.15–0.15); TL = 0.14 (0.14–0.14); PL = 0.56 (0.56–0.56); SL = 0.85 (0.84–0.85); SC = 0.82 (0.81–0.82); FB = 1.88 (1.87–1.89); BL = 3.62 (3.57–3.66). Habitus as in Fig. 10. Lustre and colour. Body rather lustrous, quite uniformly and deeply punctate, but microsculpture only in traces. Pitch black, even apices of tibiae and tarsi very dark, almost black. Shape and sculpture. Head with prominent supraantennal tubercles and arcuate longitudinal impressions mediad, eyes as long as temples, latter perfectly rounded, bulging. Neck delineated with occipital groove, vertex before neck unimpressed. Antennae with first antennomere unusually thick, middle segments very slightly elongate, penultimate articles slightly transverse. Pronotum with anterior corners strongly protruding and narrow-angled, arcuate sides slightly concave in posterior half; midline elevated in posterior 2/3, disc obliquely impressed at the sides of posterior part, posteriorly bordered by arcuately elevated ridge; near middle of midline two insignificant elevations. Elytra rather parallel-sided, apically with thin marginal bead, moderately arched, traces of membranous lobe only in outer 1/5; surface rather even and convex, only traces of impressions near shoulder besides regular longitudinal impression behind scutellum. Apex of abdominal tergite VII with thin palisade fringe. Punctation and microsculpture. Clypeus without microsculpture, epistomal suture as a thin, transversal, slightly elevated stripe. Head and pronotum strongly, deeply and densely punctate, less dense on elevations, microsculpture absent even in depressions. Neck with fine coriaceous microsculpture (transverse cells), much less shiny than rest of head. Strength of elytral punctation between head (shallower) and pronotum (deeper), more even, puncture interspaces little less than puncture diameters, punctures slightly more dense in two shallow impressions behind scutellum, no microsculpture. Abdomen without microsculpture, very strongly punctate, punctures slightly confluent, at elevated parts somewhat fading, average interspaces about as puncture diameters. Pubescence. Body setation short and sparse, except a stronger bristle near anterior pronotal corner. Elytral setation directed posteriad but in outer posterior corners turning postero-laterad, side without peculiar setae. Abdominal tergites apically with longer, postero-mediad



Figs 147–151: *Thinodromus topali*: (147) male sternite VIII; (148) male tergite X; (149) aedeagus, frontal view; (150) median lobe, lateral view; (151) left paramere, lateral view, magnified (1.5 ×). Scale bar = 0.1 mm (151) 0.15 mm (149–150), 0.2 mm (148), 0.22 mm (147).

directed setae. Primary and secondary sexual features. Male sternite VIII as in Fig. 147, male tergite X as in Fig. 148. Aedeagus as in Figs 149–151.

Distribution and bionomics. This species is known only from Argentina, between latitudes 39–42° South. The holotype specimen was sifted from grasses and soil under lying trunks on pasture.

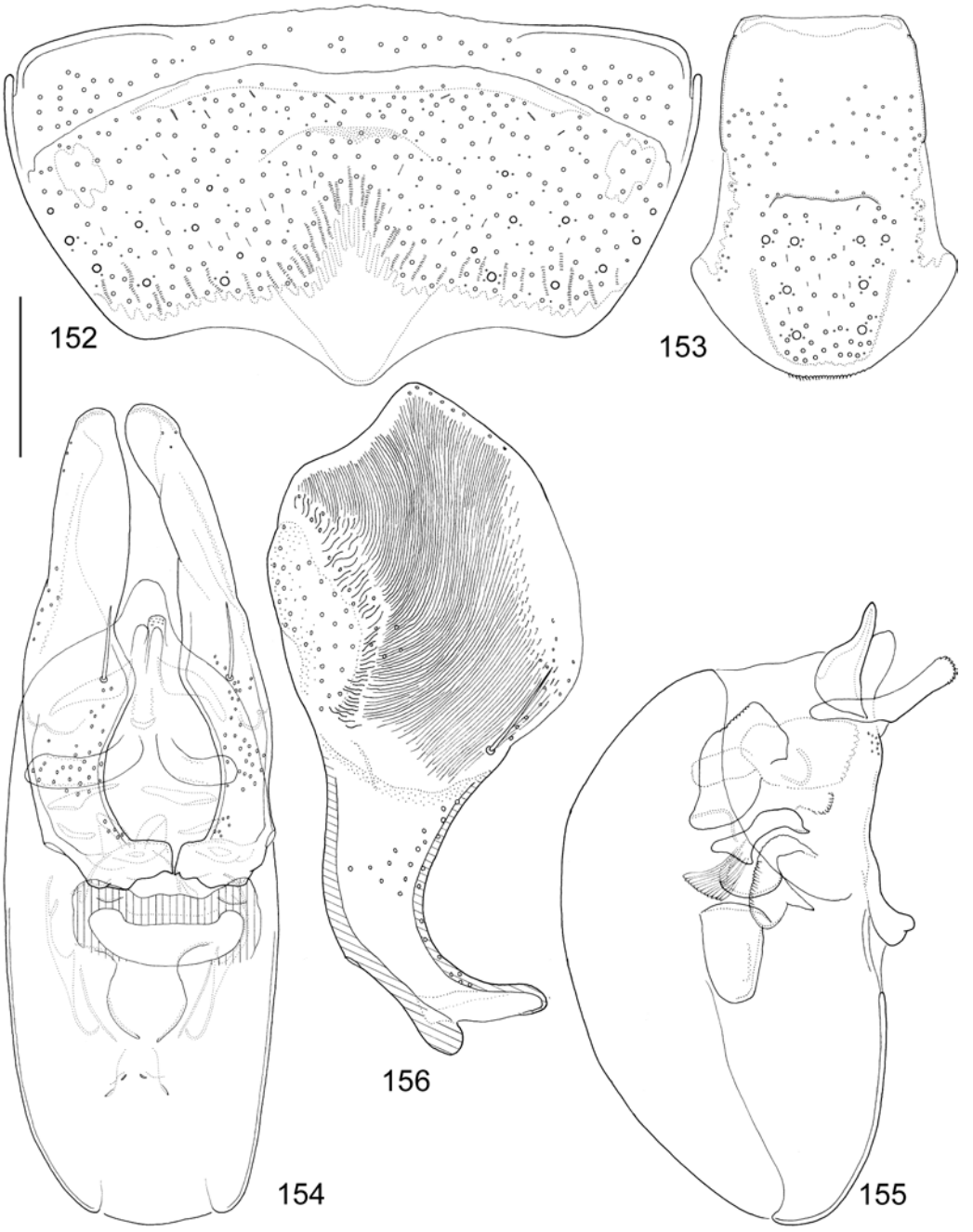
Thinodromus toroi sp.n.
(Figs 69, 152–156, 166)

Type locality. Argentina, Neuquén prov., Parque Nac. Lanín, Río Malleo along road RP60, 39°36.132'S 71°22.373'W, 990 m.

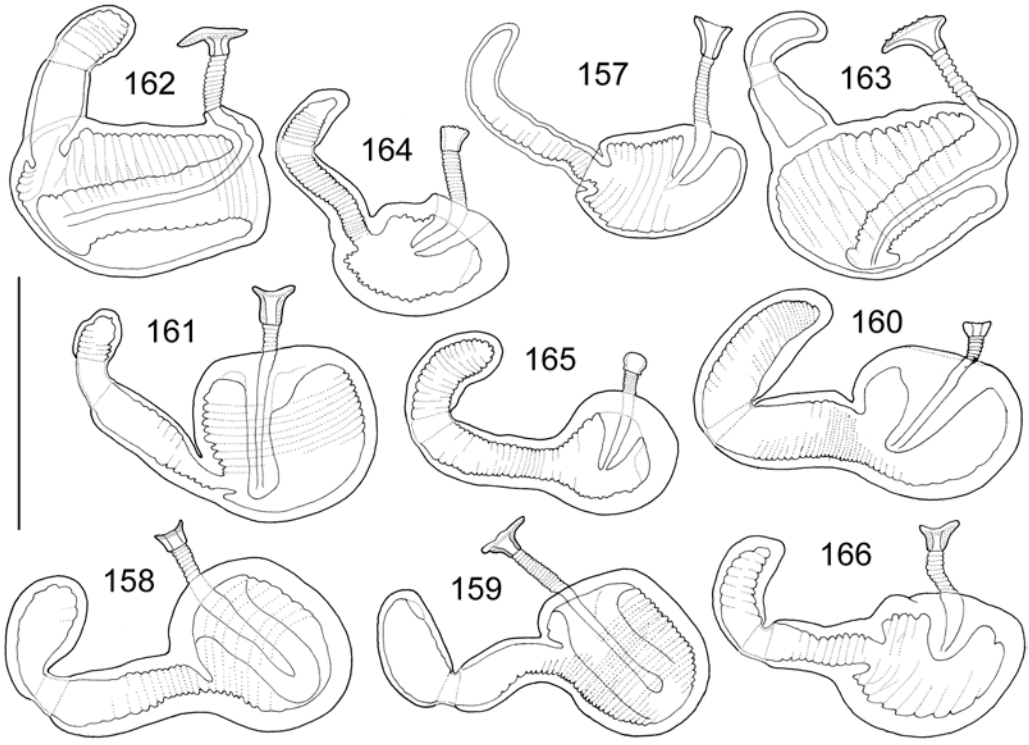
Type material. Holotype ♂: "ARGENTINA: Neuquén, Lanín NP,; Río Malleo along road RP60,; 39°36.132'S, 71°22.373'W, 990 m,; 9.XII.2019, leg. Murányi et al. (/15); bank of Río Malleo, turning over; mossy rocks and wood, singled" (HNHM). **Paratypes** (76): ARGENTINA: Neuquén, 23 km W San Martin de los Andes, [Puerto] Pucará, Lago Lacar [40°10.0'S 71°37.5'W], 20.I.1972, leg. L. Herman (868), leaf litter near lake (1, AMNH); CHILE: Curicó prov., Cerro Hueca-Huecán, 15 km E Curicó, Zapallar, 35°03.97'S 71°07.45'W, 1.X–4.XI.2008, leg. J.E. Barriga-Tuñón, sodium light (5, ZMUF); Concepción prov., Estero Ñonguén [36°50'20"S 73°00'20"W], 11.XII.1977, leg. T. Čekalović (1 ♂, 1, MHNG, 1 ♂, 1 ♀, ZMHB, 2 ♂, 2 ♀, 13, SEMC, 1 ♂, HNHM), same but 24.XII.1979 (7, AMNH); Concepción prov., Río Andalién [36°47'50"S 72°56'50"W], 2.XII.1979, leg. T. Čekalović (6, AMNH); Arauco prov., Puente Río Trongol [37°32'40"S 73°25'20"W], 12.IV.1997, leg. T. Čekalović (1 ♂, FMNH); Malleco prov., Angol [37°48.0'S 72°43.0'W], 31.XII.1950, leg. E.S. Ross & A.E. Michelbacher (2, CASC); Cautín prov., 80 km E Temuco, 3 km E Melipeuco, 38°49.95'S 71°39.70'W, 600 m, river right bank, 7.XII.1999, leg. V.I. Gusarov (1146), under stones, in moss and flood refuse (1, ZMUN, 1, NHMW); Osorno prov., Parque Nacional Puyehue, 3.1 km E Anticura, Salto los Novios, 415 m [40°39.5'S 72°09.0'W], 19.XII.1982, leg. A. Newton & M. Thayer (ANMT 662.1), river flood debris (FMHD#82-853) (1, FMNH, 2, AMNH); Osorno prov., 7.7 km NE Termas de Puyehue, 200 m [40°40.2'S 72°16.4'W], 19–25[23].XII.1982, leg. A. Newton & M. Thayer (ANMT 664), Valdivian rainforest, on & under wet rocks at stream (most oxytelines on algae on log) (8, AMNH); Osorno prov., Aguas Calientes, Río Chanleufu, 40.740°S 72.300°W, 14.XII.2013, leg. T. Struyve, small stream with litter trapped by roots at water (24, coll. Struyve, 1 ♂, 1 ♀, BMNH, 1 ♂, 1 ♀, NMPC, 1 ♂, 1 ♀, ZMUC); Llanquihue prov., Lago Llanquihue, 41°13'25.5"S 72°39'23.0"W, 60 m, stream next to road, 16.XII.2014, leg. I. Ribera (12) (2, coll. Assing); Llanquihue prov., road EN225 between Puerto Varas and Ensenada, Ponte Rio Pescado, 41°15.216'S 72°47.726'W, 40 m, right bank of Rio Pescado, 6.I.2014, leg. L. Toledano & R. Olivieri (2 ♂, MHNG).

Differential diagnosis. Often collected with *Th. tegens* sp.n., but distinguishable by the distinctly punctate elevated areas on the pronotal side. Out of the similar species with spotted/lighter elytra it differs from *Th. signatus* and *Th. signatoides* by the relatively long elytra, from *Th. franzi* sp.n. by the less convex and moderately shiny elytra and denser, finer elytral punctation.

Description. Measurements (in mm, n = 10): HW = 0.64 (0.59–0.67); TW = 0.59 (0.53–0.64); PW = 0.62 (0.58–0.67); SW = 0.91 (0.86–0.98); AW = 0.94 (0.87–1.03); HL = 0.45 (0.43–0.46); EL = 0.21 (0.20–0.23); TL = 0.10 (0.08–0.11); PL = 0.53 (0.50–0.57); SL = 1.08 (1.01–1.15); SC = 1.05 (0.98–1.12); FB = 2.11 (2.01–2.20); BL = 3.89 (3.69–4.10). Habitus as in Fig. 69. Lustre and colour. Body moderately lustrous, finely and densely punctate and microsculptured, but on elytra interspaces remaining shiny and pronotal "knobs" also shining. Blackish dark brown, except small reddish spot on elytra near posterior 3/4 of suture (sometimes radiating towards and onto elytral sides). Mouthparts and antennae dark brown, legs reddish medium to dark brown. Shape and sculpture. Head with prominent supraantennal tubercles and arcuate longitudinal impressions



Figs 152–156: *Thinodromus toroi* sp.n.: (152) male sternite VIII; (153) male tergite X; (154) aedeagus, frontal view; (155) median lobe, lateral view; (156) left paramere, lateral view, magnified (1.5 ×). Scale bar = 0.1 mm (156) 0.15 mm (154–155), 0.17 mm (153), 0.18 mm (152).



Figs 157–166: Spermatheca of *Thinodromus araucanus* (157), *Th. asperatus* (158), *Th. fulgidus* (159), *Th. impressipennis* (160), *Th. luteipes* (161), *Th. obscurus* (162), *Th. puncticollis* (163), *Th. signatoides* (164), *Th. tegens* sp.n. (165) and *Th. toroi* sp.n. (166). Scale bar = 0.1 mm (160, 166), 0.11 mm (158–159), 0.12 mm (157, 163–165), 0.14 mm (161–162).

mediad, eyes a third longer than temples, latter perfectly rounded, slightly bulging. Neck delineated with occipital groove, vertex before neck impressed. Antennae with middle segments almost twice as long as broad, penultimate articles slightly elongate. Pronotum with anterior corners barely marked and obtuse-angled, sides arched anteriorly, concave posteriorly; midline slightly elevated, more strongly posteriorly, interrupted in middle by transversal impression, disc strongly, obliquely impressed at the sides of posterior part, posteriorly bordered by arcuately elevated ridge; besides anterior midline two small elevations. Elytra very slightly dilating posteriorly, apically with thin marginal bead, in inner half straight and oblique in outer half strongly arched, there with membranous lobe; surface appearing rather even, shallow impressions on disc in anterior third from shoulders. Apex of abdominal tergite VII with medially broader palisade fringe. Punctation and microsculpture. Clypeus with fine and dense, rather strong coriaceous microsculpture, epistomal suture obsolete, partially marked (laterally). Head and pronotum punctate, fine and dense coriaceous microsculpture everywhere on surface but stronger in depressions; elevated parts appear shinier because of less dense punctation (interspaces 3 × puncture diameters), in impressions interspaces less than diameters, towards middle of pronotal side strong microsculpture dominating (same around eyes).

Neck with fine coriaceous microsculpture (very transverse cells), less shiny than rest of head. Elytra with much more even punctation, puncture interspaces about as puncture diameters, slight ruggedness in two impressed, shallow pits behind scutellum. Abdomen with fine, slightly transverse coriaceous microsculpture, very fine and inconspicuous punctation, average interspaces about 4 × puncture diameters. Pubescence. Body setation short and sparse, except a stronger bristle near anterior pronotal corner plus two near 2/5 length of side. Elytral setation directed posteriad but in outer posterior corners turning postero-laterad, side with a few stronger setae (more erect but otherwise inconspicuous). Abdominal tergites apically with longer, postero-mediad directed setae. Primary and secondary sexual features. Male sternite VIII as in Fig. 152, male tergite X as in Fig. 153. Aedeagus as in Figs 154–156. Spermatheca as in Fig. 166.

Distribution and bionomics. This species is known only from Argentina, between latitudes 36–42° South. This species seems to be rather common and widespread. Most frequently it was found on riverbanks, associated with flood debris, moss & algae on wood pieces or rocks.

Etymology. The species is named after Haroldo Toro Gutiérrez (1934–2002) who was a born teacher and researcher, a student of José Herrera, from 1956 taught and became professor at the Universidad Católica de Valparaíso, which he never left. He studied Chilean bees and collaborated with Charles Michener (SEMC) in the 1970s, hence their close relationship and my luck that this connection could be used for my project.

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