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Chapter 15

ANAPIDAE

2 genera, 2 species

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Similar families —

Theridiidae (p. 235), Mysmenidae (p. 175), Symphytognathidae (p. 226), Theridiosomatidae (p. 244).

Diagnosis —

Gertschanapis is monotypic and contains only *Gertschanapis shantzi* (GERTSCH 1960a). The females can be distinguished from all other North American spiders except *Anapistula* (Symphytognathidae) by the lack of palpi, and from *Anapistula* by the possession of eight, not four, eyes. The males are small (<2mm) and have an abdominal scutum. The lateral sides of the carapace and the dorsum of the abdomen are liberally provided with small pits or sclerotized dots. The species makes a small, horizontal web similar only to *Maymena* (Mysmenidae). *Comaroma* is a Palearctic anapid genus, but by the palp structure and presence of a 4th tarsal comb, "*Comaroma mendocino*" (LEVI 1957d) is a theridiid, not an anapid. It is the only six-eyed North American theridiid under 2mm, and, like *Gertschanapis*, has an abdominal scutum.

Characters —

body size: males ~ 1.0-1.5 mm; females 1.0-1.5 mm.
color: carapace and abdomen coriaceous to sclerotized, reddish, legs lighter.
carapace: highest at eye region (Figs. 15.1-15.2).
sternum: broadly rounded or nearly square, 4th coxae widely separate.
eyes: six (AME absent) or eight, laterals contiguous (Figs. 15.1-15.2, 15.4).
chelicerae: promargin with three teeth, retromargin with denticles or bare.
legs: length order 1243.
abdomen: slightly flattened dorsally, males with scuta (Figs. 15.1-15.2, 15.5).
spinnerets: Six spinnerets small, fleshy colulus between and in front of anterior spinnerets.
respiratory system: book lungs absent in *Gertschanapis*, normal in "*Comaroma mendocino*".
genitalia: entelegyne, *Gertschanapis shantzi* embolus long, spiraled (Fig. 15.3); "*Comaroma mendocino*" short and straight (Fig. 15.6).

Distribution —

Gertschanapis thus far occurs in forests of California and Oregon. The range of "*Comaroma mendocino*" is restricted to California.

Natural history —

Gertschanapis shantzi inhabits humid California and Oregon forests (coastal, oak, conifer), where it spins small, horizontal orb webs with out-of-plane radii (Fig. 15.7) in the interstices of litter, among fern fronds, and other similar spaces. Web construction has not been observed in *Gertschanapis*, but anapid web construction is generally like the mysmenid *Maymena* (Eberhard 1986, see Chapter 40:175). "*Comaroma mendocino*" is known from one ber-

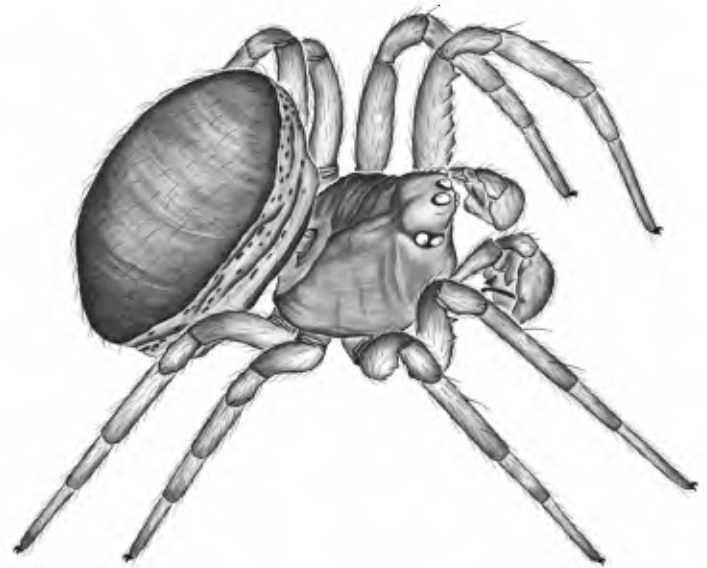


Fig. 15.1 *Gertschanapis shantzi* (GERTSCH 1960a)

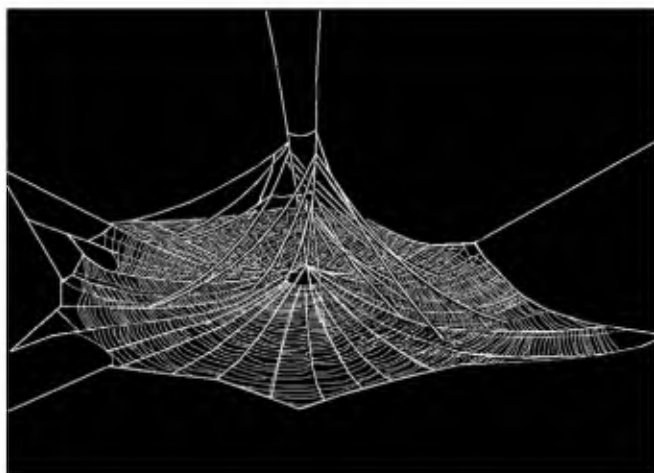
lese sample from a northern California mesic woodland. The biology is unknown.

Taxonomic history and notes —

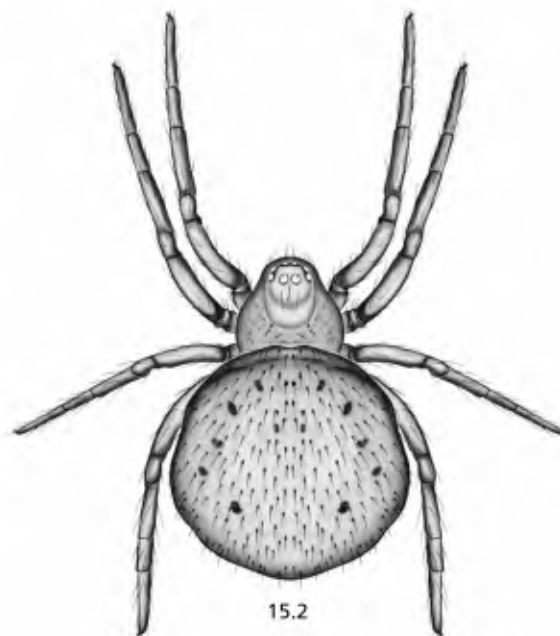
Gertsch (1960a) described *G. shantzi* in *Chasmocephalon* O. PICKARD-CAMBRIDGE 1889a, but Platnick and Forster removed it to its own genus in 1990. It is a typical anapid. A number of short, mainly descriptive papers on anapids have been published in recent years and the family needs a review at the generic level. Levi (1957d) described *C. mendocino* in a new monotypic genus, *Archerius*, but Oi (1960a) transferred it to the anapid genus *Comaroma*, where it has remained ever since. Anapidae is part of the symphytognathoid clade (Griswold *et al.* 1998), although the composition of the family and its monophyly have been questioned (Schütt 2003). Phylogenies of Theridiidae have been recently published, but they omit "*Comaroma mendocino*" (Arnedo *et al.* 2004, Agnarsson 2004)

Genera —

Comaroma BERTKAU 1889, *Gertschanapis* PLATNICK & FORSTER 1990



15.7



15.2

Key to genera —
North America North of Mexico

- 1 Six eyes (Fig. 15.4) ***Comaroma***
 Div. 1 species: *Comaroma mendocina* (Levi 1957d) [Figs. 15.4-15.6]
 — Dist. CA — Ref. Levi 1957d — Note originally described in *Archerius* Levi 1957d
- Eight eyes (Fig. 15.2) ***Gertschanapis***
 Div. 1 species: *Gertschanapis schantzi* (GERSTSH 1960a) [Figs. 15.1-15.3]
 — Dist. CA and OR — Ref. Gertsch 1960a



15.3



15.4



15.5



15.6