Spiders of North America — 
**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 Paleartic 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 berasample 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
Key to genera —
North America North of Mexico

1 Six eyes (Fig. 15.4) ........................................... "Comaroma"
   Div. 1 species: "Comaroma" mendocino (Lev 1957d) [Figs. 15.4-15.6]
    — Dist. CA — Ref. Lev 1957d — Note originally described in Arachnus Lev 1957d
—— Eight eyes (Fig. 15.2) ............................... Gertschanapis
   Div. 1 species: Gertschanapis schantzi (Gerstch 1960a) [Figs. 15.1-15.3]
    — Dist. CA and OR — Ref. Gerstch 1960a