

FAMILY: Meloidae (Blister Beetles)

DESCRIPTION: The Meloidae are long and slender, and often bicolored. The pronotum is much narrower than the elytra -- and unlike that of the Oedemeridae (False Blister Beetles), also much narrower than the head. From above, the head of the Meloidae appears somewhat rectangular, and tapering into a small neck. The elytra are soft and often rather loose. Antennae are threadlike or beadlike, while the long legs have the 5-5-4 tarsal formula common to most close relatives of the Tenebrionidae.

ECOLOGY: Larvae are predatory, undergoing hypermetamorphosis (extra larval stages) to allow for specific behaviors such as getting bees to carry them home to their own nests, where the larvae proceed to eat the bee's eggs and food stores. Such species then continue to molt in the bee's nest. Other larvae, meanwhile, are beneficial because they eat grasshopper eggs. Adults of the Meloidae may be found on flowers or crops; many are pests of tomatoes, potatoes (the "old-fashioned potato beetles"), and other important plants.

USEFUL TAXONOMIC WORKS:

Bologna, M A {a}; Fattorini, S; Pinto, J D. Review of the primitive blister beetle genus *Iselma*, with a description of the first instar larva (Coleoptera: Tenebrionoidea: Meloidae). *African Entomology* 9(2), September 2001: 105-129

Pinto JD, Bologna MA. (1999). The New World genera of Meloidae (Coleoptera): a key and synopsis. *Journal of Natural History* 33 (4): 569-620.

COLLECTION METHODS: mostly sweeping or beating flowers, though some come to lights



Cissites maculata

DIVERSITY: 3000 species worldwide

RANGE: While spread worldwide, the Meloidae are prevalent mostly in warmer, drier regions. They are absent from New Zealand.

HABITAT: Around flowers; in areas where bees or grasshoppers are present.

FAMILY: Oedemeridae (False Blister Beetles)

DESCRIPTION: The Oedemeridae are slender, parallel-sided, and elongated -- generally 5-20 mm in length. Their bodies are fairly soft, often with one or two particularly bright colors. The pronotum is rather narrow, though often a bit wider nearest the head. Antennae are fairly long, and tarsal segments are arranged in a 5-5-4 pattern, with the next-to-last segment lobed and extremely hairy beneath.

ECOLOGY: All stages are phytophagous (plant-eating); larvae feed in moist rotting wood, while adults can often be found on flowers during the day, feeding on nectar and pollen.

USEFUL TAXONOMIC WORKS:

Gatti, Enzo, Fabbri, Andrea. 2001 Topographic catalogue of the oedemerid beetles from Belluno province (Coleoptera Oedemeridae). *Bollettino del Museo Civico di Storia Naturale di Venezia* 52: 87-97

Holz, C; Streil, G; Dettner, K. 1994. Intersexual transfer of a toxic terpenoid during copulation and its paternal allocation to developmental stages: quantification of cantharidin in cantharidin-producing oedemerids (Coleoptera: Oedemeridae) and canthariphilous pyrochoids (Coleoptera: Pyrochroidae). *Zeitschrift fuer Naturforschung Section C Biosciences* 49(11-12), November-December: 856-864

Arnett, R. H., Jr. 1953. The oedemerid beetles of the Bimini island group, Bahama islands, British West Indies. *Amer. Mus. Novit.* 1646: 1-13.

Arnett, R.H. 1961. Contribution towards a monograph of the Oedemeridae 14. A key to and notes on the New World genera. *Coleopt. Bull.* 15: 49-64.



DIVERSITY: 1000 species worldwide; 300 in the Neotropics; 8 in Hispaniola.

RANGE: The subfamily Oedemerinae is common worldwide, while the subfamily Calopodinae occurs only in Eurasia and North and Central America.

HABITAT: Adults live around flowers, while larvae can be found in rotting wood -- including, for one species, wharf pilings and ship timbers (the "wharf borer").

COLLECTION METHODS: Adults can be beaten from flowers/vegetation during the day or lights at night