

Chaoboridae

Rüdiger Wagner (1998 Checklist: Rüdiger Wagner)

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Diagnosis: Chaoboridae (phantom midges) are small to medium sized non-biting lower Diptera (Nematocera). They are closely related to Culicidae and Corethrellidae. Eyes reniform, antenna bare in both sexes of *Chaoborus* and in male *Mochlonyx*. Antenna with scapus, pedicel and flagellum with 13 flagellomeres. Mouthparts elongate, palpus 5-segmented. Wing elongate with 10 longitudinal veins. Legs delicately setose, but without scales, tibiae with 0-2 spurs, tarsal claws of different size and shape. Abdomen with 8 segments and terminalia; tergite 9 (epandrium) well-developed, sternite 9 (hypandrium) reduced. Gonocoxites well developed with subapical projection. Sclerites consist of only a pair of penis valves. Female genitalia with 3 seminal capsules and 2 or 3 spermathecal ducts. Larvae transparent to brownish with a pair of conspicuous air sacs in thorax and in abdominal segment 7. Head capsule complete, antenna prehensile. Thorax large with three segments fused into a single unit. Abdomen with 8 larger segments, 1 size-reduced and one anal segment. *Chaoborus* larvae apneustic (without functional spiracles). Pupae similar to culicid pupae but pale translucent with abdomen hanging straight down. End of abdomen with a pair of large anal paddles. Eggs often laid in floating disc-shaped jelly-like matrix.

Biology: All larvae are aquatic and prey on specimens of their own species and other small arthropods (insects, daphnids, cyclopoids, oligochaetes, rotifers). *Chaoborus* larvae live in permanent small to large water bodies (with or without fish), *Cryophila* and *Mochlonyx* prefer small or temporary water bodies (e.g. tree-holes). Only some *Chaoborus* species are planktonic. Overwintering in egg stage is common in *Mochlonyx* and *Cryophila*, and also in some *Chaoborus* species.

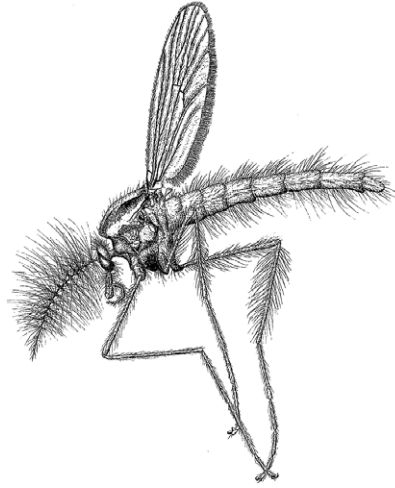
Nomenclature and classification: According to Saether (2002).

Number of species: CH: 2 (1998 Checklist: 2),
AT: 2, DE: 7, FR: 4, IT: 6, Europe: ~9, World: ~90.

Level of faunistic knowledge in Switzerland: In need of improvement.

General references: Saether (2002) [general].

References to the Swiss fauna: Wagner (1998).



Chaoborus crystallinus,
male (CMPD2, p.306).

Checklist

Chaoborus Lichtenstein, 1800

(*Chaoborus* s.str.)

- *crystallinus* (De Geer, 1776) !
- *flavicans* (Meigen, 1830) !

References

- Saether O.A. 2002. Insecta: Diptera: Chaoboridae. In: Schoerbel J. & Zwick P. (eds). Süßwasserfauna von Mitteleuropa 21(10): 1-37.
- Wagner R. 1998. 10. Chaoboridae. In: Merz B., Bächli G., Haenni J.-P. & Gonth Y. (eds). Diptera - Checklist. Fauna Helvetica 1: 88. CSCF / SEG, Neuchâtel, 369 pp.