

**POPULATION DYNAMICS OF THE NYMPHS OF *Centroptella ceylonensis* MULLER-LIEBENAU AND *C. SOLDANI* MULLER-LIEBENAU (EPHEMEROPTERA, BAETIDAE) IN THE ASWATHU OYA, PUWAKPITIYA**

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Mayfly nymphs are very common in the running waters of Sri Lanka and are an important component in the macroinvertebrate communities. The abundance of an endemic baetid species, *Centroptella ceylonensis* Muller-Liebenau nymphs in the Aswathu Oya, Puwakpitiya were studied from March 2000 to March 2001 to investigate the developmental pattern of each species at the study site. The nymphs were sampled fortnightly by lifting stones while holding a net against the downstream flow and the samples were preserved immediately in 10% formaldehyde. The samples were washed thoroughly and the nymphs were identified to the species level in the laboratory. The nymphs belong to each species were grouped into 1 mm arbitrary size-classes according to body length of each individual. The body length of *C. ceylonensis* ranged from 0.59 - 4.7 mm, and in *C. soldani* range of body lengths was 1.35 - 3.9 mm. The most abundant species throughout the study period was *C. Ceylonensis* and the percentage abundance of this species ranged from 84.3% to 100 % whereas the percentage abundance of *C. soldani* ranged from 0% in March 2000 to 15.7% in September 2000. As *C. soldani* was present in low numbers, no attempt was made to investigate its pattern of development during this study.

The individuals belonging to 1-2 mm and 2-3 mm size-classes of *C. ceylonensis* were common at the study site throughout the study period and the nymphs of 4-5 mm size-class were observed only on a few occasions. The results indicated that *C. ceylonensis* had overlapping generations and continuous emergence at the study site throughout the study period.