

# Systematics of the Plecoptera (Insecta) in Viet Nam

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Plecoptera (Stoneflies) is a relatively small insect order comprising about 2000 species worldwide. The nymphs mainly inhabit in highly oxygenated mountain torrents. As such, some are excellent biotic indicators of water quality and many are important food for game fishes. Previously, 14 species in 4 families were recorded from Viet Nam: *Amphinemura gressitti* Kawai, *A. handschini* Grijkes, *Peltoperlopsis malickyi* Stark, *Cryptoperla bisaeta* (Kawai), *C. karen* Stark, *Agnentina jarai* Stark and Sivec, *Neoperla yao* Stark, *N. mnong* Stark, *N. coronata* Zwick, *N. hoabinhtica* Navas, *N. angustilobata* (Navas), *Neoperlops gressitti* Banks, *Phanoperla simplex* Zwick, and *Phanoperla malayana* Zwick.

In the present work, 46 species, 20 genera, and 4 families of Plecoptera were comprehensively studied based on adult and nymphal materials collected from ca. 40 localities throughout Viet Nam during 2000–2002: *Perlomyia* sp. Vn1, *Palaleuctra* sp. 1 (n. sp.), *Rhopalopole subnigra* Okamoto, *Amphinemura chui* Wu, *Amphinemura* sp. 1 (n. sp.), *Amphinemura* sp. 2 (n. sp.), *Amphinemura* sp. 4 (n. sp.), *Amphinemura* sp. 5 (n. sp.), *Amphinemura* sp. 6 (n. sp.), *Amphinemura* sp. 7 (n. sp.), *Amphinemura* sp. Vn1, *Amphinemura* sp. Vn2, *Indonemoura* sp. 1 (n. sp.), *Mesonemoura* sp. 1 (n. sp.), *Mesonemoura* sp. Vn1, *Nemoura* sp. 1 (n. sp.), *Nemoura* sp. 2 (n. sp.), *Nemoura* sp. 3 (n. sp.), *Nemoura* sp. 4 (n. sp.), *Nemoura* sp. Vn1, *Nemoura* sp. Vn2, *Protonemura* sp. 1 (n. sp.), *Protonemura* sp. 2 (n. sp.), *Protonemura* sp. 3 (n. sp.), *Protonemura* sp. Vn1, *Cryptoperla meo* Stark, *Peltoperlopsis sinensis* Wu and Claassen, *Etrocorema nigrogeniculatum* (Enderlein), *Etrocorema* sp. Vn1, *Kamimuria taoi* Wu, *Kamimuria* sp. Vn1, *Kiotina* sp. Vn1, *Neoperla lushana* Wu, *Neoperla* sp. 1 (n. sp.), *Neoperla* sp. 2 (n. sp.), *Niponiella* sp. Vn1, *Paragnetina klapaleki* Wu and Claassen, *Paragnetina* sp. 1 (n. sp.), *Phanoperla lao* Stark, *Phanoperla* sp. Vn1, *Phanoperla* sp. Vn2, *Tetropina* sp. 1 (n. sp.), *Togoperla noncoloris* Du et Chou, *T. perpicta* Klapalek, *Togoperla* sp. Vn1, *Tyloperla attenuata* Wu and Claassen. (sp. Vn: arbitrary species known only in nymph). In some species, their nymphs were reared in the field and laboratory to associate the nymphal and adult stages. Full descriptions for known stages of each species were provided with line-drawings of key characters. Taxonomic keys, taxonomic discussions, and ecological notes were additionally provided.