

A new species of *Polydictya* from Vietnam (Hemiptera, Fulgoromorpha, Fulgoridae)

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Abstract.— A new species of *Polydictya* Guérin-Méneville, 1844, *P. vietnamica* n. sp., is described from Vietnam and illustrated. The species is compared with the other *Polydictya* species showing hind wings red basally. A distribution map is given.

Résumé.— Une nouvelle espèce de *Polydictya* Guérin-Méneville, 1844, *P. vietnamica* n. sp., est décrite du Vietnam et illustrée. L'espèce est comparée aux autres espèces de *Polydictya* à ailes postérieures rouges à la base. Une carte de distribution est donnée.

Key-words.— Fulgoridae, *Polydictya vietnamica* n. sp., Vietnam.

Introduction

Among the Fulgoromorpha collected by the second author of this paper in Vietnam, we have been lucky enough to find a new species of *Polydictya* Guérin-Méneville, 1844. Sixteen species are presently recognized in the genus (METCALF, 1947; LALLEMAND, 1963; NAGAI & PORION, 1996, 2004) that is widely distributed in South Eastern Asia, from Ceylon and India to Vietnam and Sulawesi. Only three species of the genus were reported to date from Vietnam (NAGAI & PORION, 1996): *P. basalis* Guérin-Méneville, 1844, *P. johanna*e Lallemand, 1956 and *P. tricolor* (Westwood, 1845).

Materials and methods

The type specimen is deposited in the collections of the Royal Belgian Institute of Natural Sciences (RBINS, Brussels, Belgium).

A distribution map produced by the software *CFF* (BARBIER & RASMONT, 2000) and photos of habitus are provided.

The following acronyms are used for the measurements (measurements are taken as in CONSTANT, 2004): BF, breadth of the frons – BT, breadth of the thorax – BTg, breadth

of the tegmen – BV, breadth of the vertex – LF, length of the frons – LM, length of the mesonotum – LP, length of the pronotum – LT, total length – LTg, length of the tegmen – LV, length of the vertex.

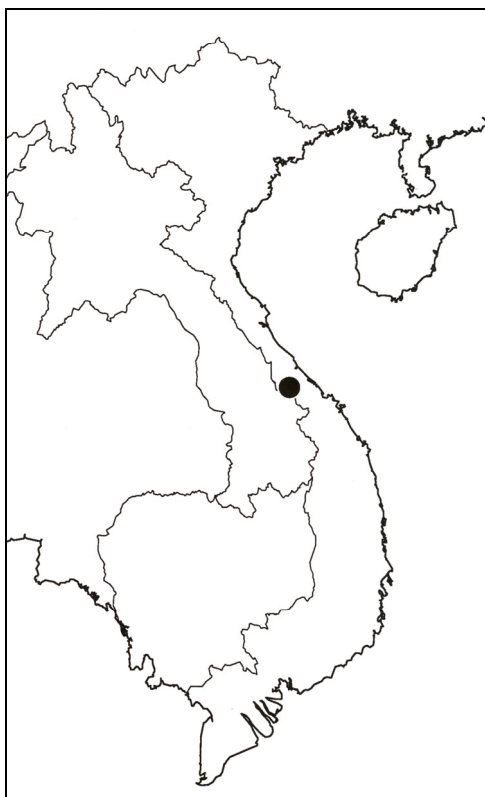


Fig. 1.– Distribution map of *Polydictya vietnamica*.

Taxonomy

Polydictya vietnamica n. sp. (figs. 1-4)

HOLOTYPE ♀ labeled: [Coll. I.R.Sc.N.B., Vietnam, Quang Tri prov., Dakrong district, Huc Nghi commune, 6/V/2005, 265m, Ho. 1472, leg. H. T. Pham]. Geographical coordinates: 16°29'35.7" N - 107°00'33.5" E.

Diagnostic characters. (1) tegmina with corium uniformly coloured and membrane darker, brown; (2) hind wings with basal half red, without bluish patch along external margin basally; (3) pronotum bicolour: brown anteriorly and yellowish posteriorly.

Description. LT: 40 mm (extrapolated wingspan: 76.4 mm).

Head: eyes included, 3/4 as broad as thorax; testaceous; vertex concave, longitudinally wrinkled, with fore and hind margins carinate and 3 umbilicated points; fore margin with minute points, rounded in dorsal view; frons smooth, convex, with longitudinal groove on each side, broader at base and with upper margin rounded in normal view; frons and vertex separated by groove with depression at each side; clypeus narrower than frons, longer than broad with sides emarginate; labium elongate and narrow, surpassing hind coxae, with last segment much shorter than penultimate; ocelli present; ratio BV/LV = 2.95; BF/LF = 1.1.

Thorax: prothorax testaceous with anterior half of pronotum brown; 2 impressed points and 2 depressions on disc along brown zone; sides of pronotum slightly punctuate; carina between dorsal and lateral parts of prothorax; mesonotum brown with disc rugulose; ratio BT/LP+LM = 1.2; LP/LM = 0.64.

Tegmina: corium testaceous with middle of cells and line along claval joint brown; membrane brown; costal margin slightly rounded near apex; apex obliquely cut; maximal breadth near apex; ratio LTg/BTg = 2.3.

Hind wings: basal half red; apical half and hind margin brown; not reaching apex of tegmina at rest; maximal breadth near base; slightly broader than tegmina.

Legs: reddish testaceous; tibiae I and II elongate, slightly depressed; hind tibiae with 6-7 lateral and 7 apical spines; first hind tarsomere with 6 apical spines, second with 3 apical spines.

Abdomen: testaceous with sides reddish.

Etymology. The species name refers to the country of origin of the type specimen.

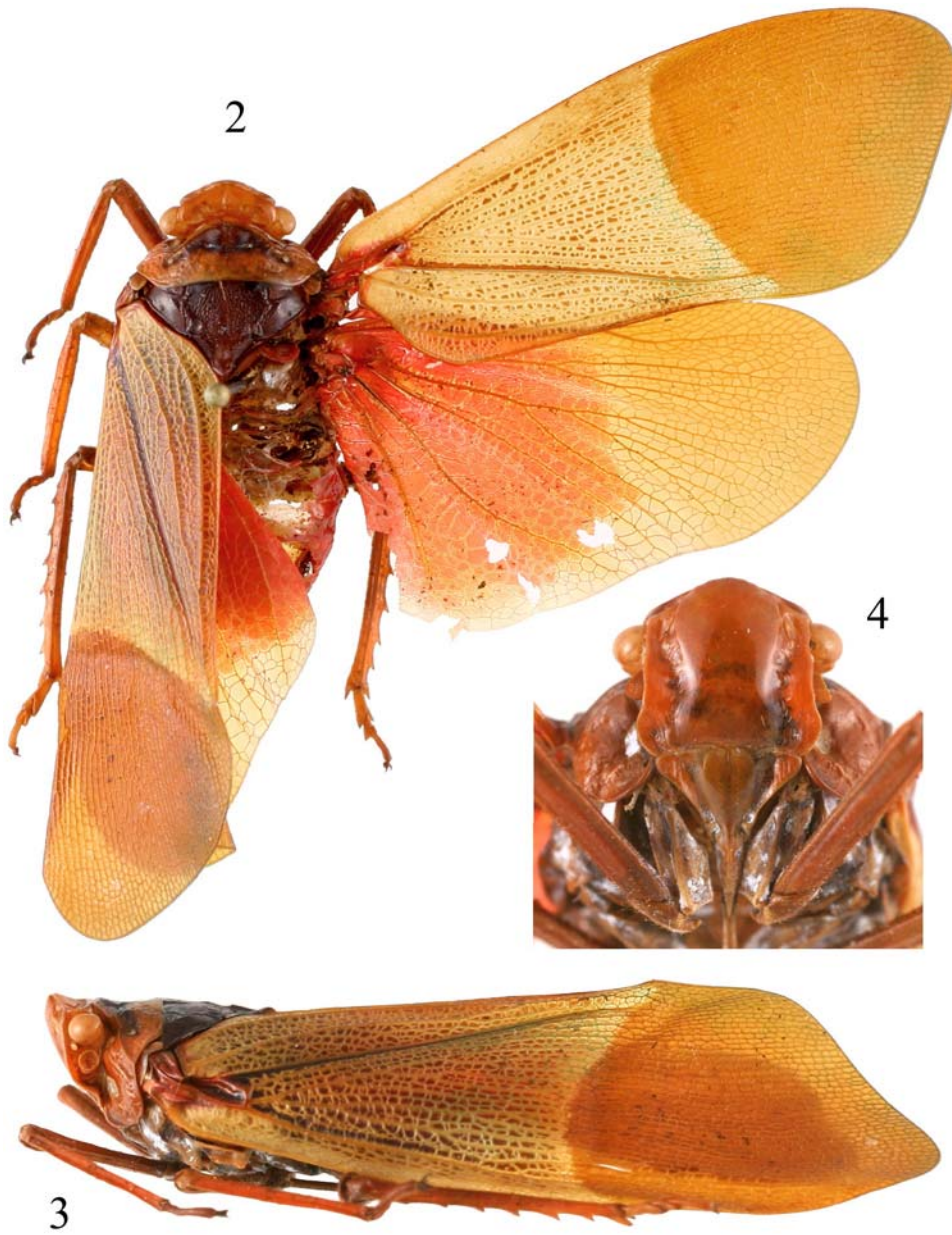
Note: the specimen examined has the abdomen in poor condition and the genitalia could not be studied. It is also possible that fresh specimens have entirely red abdomen. Unprecise zones slightly suffused with greenish are visible on corium and it is not impossible that corium is tinged with greenish in fresh specimens.

Biology. The specimen has been collected in a secondary forest insert with many big trees into fields in the mountains. Huc Nghi is situated in the buffer zone of the Da Krong Nature Reserve which is a secondary tropical evergreen forest.

Discussion

Polydictya vietnamica n. sp. is one of the largest species of the genus and 1 of the 4 species which have hind wings red basally without bluish patch along costal margin near base. The other species which show those characters are *P. pantherina* Gerstaecker, 1895 (Ceylon), *P. affinis* Atkinson, 1889 (Northern India) and *P. tricolor* (Westwood, 1845) (Assam to Vietnam).

P. vietnamica is easy to separate (1) from *P. pantherina* which has tegmina yellowish with irregular blackish patches and is much smaller (wingspan: 38-43 mm), (2) from *P. affinis* which has tegmina uniformly coloured, red on hind wings limited to first third and is smaller (wingspan: 55-58 mm), (3) from *P. tricolor* which has basal half of tegmina pale yellow with regular large black spots and apical half black with pale yellow spot on costal cell, red zone on hind wings larger and is much smaller (wingspan: 45 mm).



Figs. 2-4.— *Polydictya vietnamica*, holotype : 2.— dorsal view ; 3.— lateral view ; 4.— frons, normal view.

The discovery of this large and colourful species in Vietnam also emphasizes the need of further research in order to have a better documented appreciation of the rich biodiversity of this country.

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