NEW RECORD OF THE GENUS INDRIVAL FENNAH, 1978 (HEMIPTERA, FULGOROIDEA, DICTYOPHARIDAE) FROM CHINA

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Abstract The genus Indrival Fennah and its type species I. nenius Fennah are reported for the first time from China. The specimens studied are deposited in the Zoological Museum, Institute of Zoology, Chinese Academy of Sciences (IZCAS), Beijing, China.

Key words Dictyopharidae, Indrival, new record, China.

The dictyopharid genus Indrival was established by Fennah in 1978 to contain a single species Indrival nenius from H长得 An District, Vietnam. Since then, neither the genus nor the species has been reported in the literature. While sorting and identifying Dictyopharidae from material in the Zoological Museum, Institute of Zoology, Chinese Academy of Sciences, Beijing (IZCAS), the authors found a number of specimens of I. nenius Fennah, 1978 from Southern China. The discovery of the species represents the first record of the genus and its type species from China. We herein redescribe and illustrate the species.

Genus Indrival Fennah, 1978 New record to China


Diagnosis. Head short and broad, not distinctly produced in a cephalic process; vertex with median carina relatively distinct only in basal third to half; frons with lateral carinae converging posteriorly and approaching frontoclypeal suture; pronotum with median carina distinct, lateral discal carinae obscure and only elevated anteriorly; mesonotum tricinate on disc, lateral carinae straight, nearly parallel; hind tibiae with 5 lateral spines, and 7 apical black-tipped spines, metatarsal segments I and II with 16–22 black-tipped spines apically, respectively; aedeagus without pair of phallic processes.

Remarks. Fennah (1978) suggested that Indrival is clearly a close ally of Doraphorina and Raivuna but is distinguished from both by the shape of the head, and from the latter in the arrangement of setae on the inner surface of the genital style ('parameres' in this paper).

The genus is also externally similar to Dictyopharina Melichar, but can be distinguished from the latter by the vertex with median carina relatively distinct only in basal third to half (distinct and complete in the latter); the mesonotum with lateral carinae straight, nearly parallel (curving anteriorly towards median carina in the latter); the hind tibiae with 7 apical black-tipped spines (8 apical black-tipped spines in the latter).

Distribution. Vietnam; Southern China (Anhui, Guangdong, Guangxi, Hunan).

Indrival nenius Fennah, 1978 New record to China (Figs. 1–12)

Redescription. *σ*, length (from apex of cephalic process to tip of forewings) 9.9–10.5 mm; length of head 1.2 mm, width (including eyes) 1.5 mm; length of forewings 7.9–8.4 mm; *φ*, length (from apex of cephalic process to tip of forewings) 10.5–11.8 mm; length of head 1.2–1.3 mm, width (including eyes) 1.6–1.7 mm; length of forewings 8.4–9.5 mm.

General color pale ochraceous or stramineous green (probably green in life, but faded in dead dried specimens); intercarinal area of frons orange brown; carinae on cephalic process, frons, pronotum and mesonotum, and parts of veins on fore wings, green; fore and middle legs greenish brown with longitudinal fuscous stripes, hind legs green, brown distally on tibiae and metatarsi.

Head (Figs. 1–5) short and broad, not produced in a cephalic process. Vertex (Figs. 1–3) transversely broad and nearly trapeziform, with ratio of length to width between eyes 1.5: 1.0; anterior margin convex, lateral carinate margins converging anteriorly, posterior margin slightly concave; disc somewhat elevated mediadors in base, with median carina relatively distinct only in basal third to half. Frons (Fig. 5) longer than broad (about 1.2: 1.0), widest just below level of antennae; anterior margin arched, lateral carinate margins nearly parallel, posterior margin concave; median carina distinct and complete, lateral carinae converging posteriorly and

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approaching frontoclypeal suture. Postclypeus and anteclypeus convex medially, with distinct median carina. Rostrum long, reaching between hind coxa. Antennae (Figs. 13-15) with very small scape; pedicel large and subglobose, with more than 50 distinct sensory plaque organs distributed over entire surface; flagellum long, setuliform.

Pronotum (Figs. 1-3) distinctly shorter than mesonotum in middle line, narrow anteriorly and broad posteriorly; disc broad, slightly arched in middle front, lateral marginal areas straight and sloping, posterior margin angulately concave; median longitudinal carina distinct, lateral discal carinae obscure and only elevated anteriorly, lateral depressions big and distinct. Mesonotum (Figs. 1-3) tricarinate on disc; lateral carinae straight, nearly parallel. Forewings (Fig. 6) hyaline, ratio of length to width about 3:1; Sc slightly sinuated distad of Sc + R fork, stigma long with 3-4 cells. Legs moderately elongate, fore femora unarmored or with a single minute spine near apex, not flattened and dilated; hind tibiae with 5 lateral spines, and 7 apical black-tipped spines, metatarsal segments I and II with 16-22 black-tipped spines apically, respectively.

Male genitalia with pygofer (Figs. 7-9) narrow and long in lateral view, posterior margin with a posteriorly directed process near middle, obtuse but abruptly angulate in lateral view (Fig. 7); dorsal margin deeply excavated to accommodate anal tube, dorsal-lateral margins angularly produced posteriorly in dorsal view (Fig. 9). Anal tube (Fig. 9) large and stout in dorsal view, ratio of length to width at middle about 1.5:1.0. Anal style (Fig. 9) stout and long. Parameres (Figs. 7-8) large, with apex rounded and protruded backward in lateral view (Fig. 13); upper margin with an inward directed, black-tipped process near middle, with ventrally directed, hooklike process near sub-middle on outer upper edge; in ventral view (Fig. 8) parameres symmetrical, with numerous spiniform setae on inner surfaces in basal half grouped in a lax clump, not extending basad to basal angles. Aedeagus (Figs. 10-12) moderately large; sclerotized and pigmented portion of phallobase relatively short dorsally, long laterally and


very short ventrally; phallobase with a pair of membranous lobes on dorsal middle which produced laterad, and with a pair of elongate, membranous lobes on venter which directed caudad, and possessed 0-2 long spines at base and a row of 6-8 long spines laterally; phalli forked at base, but not pair of parallel processes produced.

Material examined. China, 7♂♂, 3♀♀.

Distribution. Vietnam (Nghe An District); Southern China (Anhui, Guangdong, Guangxi, Hunan).

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