The second species of *Echiaster* from Asia
(Coleoptera: Staphylinidae: Paederinae)

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Abstract: *Echiaster maior* nov.sp. (Laos), the second representative of the paederine genus *Echiaster* ERICHSON 1839 recorded from Asia, is described, illustrated, and distinguished from *E. unicolor* BERNHAUER 1922. The aedeagus of *E. unicolor* is illustrated for the first time.

Keywords: Coleoptera, Staphylinidae, Paederinae, *Echiaster*, Oriental region, Asia, Laos, taxonomy, new species.

Introduction

The paederine genus *Echiaster* ERICHSON 1839 was previously represented in Asia only by *E. unicolor* BERNHAUER 1922, a species distributed in China, Taiwan, and Japan (ASSING 2011).

Among material of unidentified Staphylinidae from the collections of the Naturhistorisches Museum Basel a male of *Echiaster* from Laos was found. A study of this specimen revealed that it belonged to an undescribed species, the second representative of the genus recorded from Asia.

Material and methods

The morphological studies were conducted using a Stemi SV 11 microscope (Zeiss Germany) and a Jenalab compound microscope (Carl Zeiss Jena). A digital camera (Nikon Coolpix 995) was used for the photographs. The map was created using MapCreator 2.0 (primap) software.

Body length was measured from the anterior margin of the mandibles (in resting position) to the abdominal apex, the length of the forebody from the anterior margin of the mandibles to the posterior margin of the elytra, head length from the anterior margin of the frons to the posterior margin of the head, elytral length at the suture from the apex of the scutellum to the posterior margin of the elytra, and the length of the aedeagus from the apex of the ventral process to the base of the aedeagal capsule. The "parameral" side (i.e., the side where the sperm duct enters) is referred to as the ventral, the opposite side as the dorsal aspect.
Figs 1-8: *Echiaster maior* nov.sp. (1-6) and *E. unicolor* BERNHAUER (7-8): (1) habitus; (2) fore-body; (3) male sternite VII; (4) male sternite VIII; (5-8) aedeagus in lateral and in ventral view. Scale bars: 1-2: 1.0 mm; 3-4: 0.5 mm; 5-8: 0.2 mm.
Map 1: Geographic position of the type locality of *Echiaster maior* nov.sp.

*Echiaster maior* nov.sp. (Figs 1-6, Map 1)

Type material: Holotype ♂: "LAO, Phongsaly prov., 21°41-2'N 102°6-8'E, 28.v.-20.vi.2003, Phongsaly env., ~1500 m, Pacholátko leg. / from sieved material / Holotypus ♂ *Echiaster maior* sp. n. det. V. Assing 2013" (Naturhistorisches Museum Basel).

Etymology: The specific epithet is the comparative of the Latin adjective magnus (large) and refers to the size of the species, one of the characters separating it from the similar *E. unicolor*.

Description: Body length 5.6 mm; length of forebody 3.0 mm. Habitus as in Fig. 1. Coloration: body blackish-brown, elytra with an oblique dark-reddish spot in the humeral angles; legs yellowish; antennae dark-yellowish with brown antennomere I.

Head (Fig. 2) 1.05 times as long as broad, widest across eyes, behind eyes convexly narrowed towards neck in dorsal view; posterior angles obsolete; punctation coarse, areolate, and extremely dense; interstices reduced to narrow ridges; dorsal surface matt. Eyes large, approximately 0.7 times as long as distance between posterior margin of eye to posterior constriction in dorsal view. Antenna 1.2 mm long.

Pronotum (Fig. 2) 1.35 times as long as broad and 0.78 times as broad as head; median portion broadly impressed, this impression with median elevation posteriorly; punctuation similar to that of head.

Elytra (Fig. 2) 0.75 times as long as pronotum; humeral angles marked; surface elevated
at suture and flattened elsewhere; punctation very dense and granulose. Hind wings reduced.

Abdomen as broad as elytra; tergites III and IV with very coarse and dense punctation; tergite V with coarse and dense punctation in anterior half and with somewhat finer punctation in posterior half; tergites VI-VIII with dense and fine punctation; posterior margin of tergite VII strongly convex (Fig. 1), without palisade fringe; tergite VIII distinctly oblong and with strongly convex posterior margin.

♂: sternite VII moderately transverse and with very dense dark pubescence, posterior margin weakly concave in the middle (Fig. 3); sternite VIII distinctly oblong, posterior excision broadly V-shaped (Fig. 4); aedeagus 0.75 mm long and shaped as in Figs 5-6.

Comparative notes: The new species differs from *E. unicolor*, the only other representative of the genus recorded from Asia, by larger body size (*E. unicolor*: length of forebody 2.2-2.6 mm), the longer antennae (*E. unicolor*: < 1.0 mm), the longer and more slender legs, and by the much larger aedeagus (*E. unicolor*: 0.53-0.56 mm) with a differently shaped apex of the ventral process. For illustrations of the aedeagus of *E. unicolor* see Figs 7-8.

Distribution and natural history: The type locality is situated near Phongsaly in northern Laos (Map 1). The holotype was sifted at an altitude of approximately 1500 m.

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Zusammenfassung

*Echiaster maior* nov.sp. (Laos), die zweite Art der Gattung *Echiaster* ERICHSON 1839 in Asien, wird beschrieben, abgebildet und von *E. unicolor* BERNHAUER 1922 unterschieden. Der Aedoeagus von *E. unicolor* wird erstmals abgebildet.

References


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