

## *Fischeralysia* gen.n. from Nigeria

(Insecta: Hymenoptera: Braconidae: Alysiinae)

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### Abstract

The new genus *Fischeralysia* from Nigeria (type species: *Fischeralysia polaszeki* sp.n.) is described and illustrated.

**Key words:** Hymenoptera, Braconidae, Alysiinae, *Fischeralysia*, Afrotropical, Nigeria.

### Zusammenfassung

Die neue Gattung *Fischeralysia* (Typus-Art: *Fischeralysia polaszeki* sp.n.) wird aus Nigeria beschrieben und abgebildet.

### Introduction

The genera of the tribe Alysiini of the subfamily Alysiinae STEPHENS, 1829 were recently keyed by FISCHER (1975). Among material recently collected in Nigeria and kindly provided by Dr A. Polaszek (Amsterdam) a new and rather aberrant genus was discovered, which is described below. The biology of the new genus is unknown, but all data on biology of Alysiini indicate that they are endoparasites of larvae of cyclorrhaphous Diptera. For the identification of the subfamily Alysiinae, see VAN ACHTERBERG (1990, 1993), and for the terminology used in this paper, see VAN ACHTERBERG (1988, 1993).

**Abbreviation:** RMNH = Nationaal Natuurhistorisch Museum, Leiden.

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### *Fischeralysia* gen.n.

Type species: *Fischeralysia polaszeki* sp.n.

**Etymology.** Named after the well known specialist of Alysiini and Opiinae, Dr. Max Fischer and dedicated to him because of his 65th birthday. Gender: feminine.

**Diagnosis.** Head rather prognate (fig. 4); antenna shorter than body and with fewer than 30 segments (fig. 4) and about as long as fore wing, fourth antennal segment slightly

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shorter than third segment (fig. 5); eyes distinctly setose (figs 7, 9); face strongly transverse (fig. 9); malar space without transverse (oblique) groove; frons flat; vertex with deep medio-longitudinal groove (fig. 7); anterior tentorial pits small; clypeus narrow and strongly protruding (fig. 9); epistomal suture obsolescent (fig. 9); mandible long, distinctly widened dorso-apically (figs 2, 6), second tooth lobe-shaped and obtuse, third tooth acute (fig. 2), without incisions between lobes, and with small fourth lobe ventrally (fig. 6); mesosoma distinctly depressed, its length more than twice its height; dorsal pronope medium-sized and round (fig. 10); lateral carina of mesoscutum largely absent; notauli largely absent on disc, only anteriorly widely impressed (fig. 10); medio-posterior groove of mesoscutum long, wide and deep (fig. 10); mesoscutum and scutellum flat; precoxal sulcus complete and narrowly crenulate (fig. 4); episternal scrobe shallow and linear; pleural sulcus shallow, dorsally smooth and with some crenulae ventrally (fig. 4); mesosternal sulcus distinct, and moderately crenulate; metanotum without complete median carina (fig. 10); metapleural flange medium-sized; propodeum with long median carina (fig. 10), and with areola more or less developed posteriorly (fig. 10); propodeal spiracle small and round; anterior part of propodeum longer than posterior part; vein M+CU1 of fore wing largely sclerotized (fig. 1); pterostigma elliptical; vein r emitted medially from pterostigma (fig. 1); vein 2-SR of fore wing present; vein cu-a of fore wing far antefurcal, and vertical (fig. 1); vein CU1b of fore wing longer than vein 3-CU1 (fig. 8); vein SR1 of fore wing straight; vein m-cu of fore wing far postfurcal (fig. 1); vein 3-SR of fore wing about 1.5 times vein 2-SR (fig. 1); vein M+CU of hind wing distinctly shorter than vein 1-M; vein m-cu of hind wing long and straight (fig. 1); marginal cell of hind wing normal, absent apically; fore tarsus robust, about as long as fore tibia; tarsal claws very slender, sickle-shaped (fig. 13); first tergite robust (fig. 11), its dorsal carinae present in basal half of tergite, and dorsope medium-sized; second metasomal tergite smooth; second metasomal suture absent; second and following tergites without sharp lateral crease (fig. 4); ovipositor with minute notch, and no ventral teeth; length of ovipositor sheath about 0.4 times fore wing; ovipositor sheath rounded apically (fig. 14), rather densely covered with long setae (fig. 4); hypopygium large, truncate apically (fig. 4).

Distribution. Afrotropical (Nigeria).

Biology. Unknown.

Notes. Runs in the key to the genera of the tribe Alysiinae by FISCHER (1975) to the genus *Pseudomesocrina* KÖNIGSMANN, 1959 (= *Mesocrina* FOERSTER, 1862, see VAN ACHTERBERG, 1983). However, *Mesocrina* differs as follows: vein CU1b of fore wing shorter than vein 3-CU1, vein cu-a of fore wing postfurcal, the propodeum without strong median carina, the face normal, the second tooth of mandible acute apically, the mesosoma normal, not depressed and less than twice longer than high, vein M+CU of hind wing longer than vein 1-M, the vertex without deep median groove, the eyes are glabrous, and the mandible has no fourth lobe ventrally.

The new genus runs in Wharton's key to the New World genera of Alysiini (WHARTON 1980) to the genus *Gnathopleura* WHARTON, 1980 (= *Gnathopleura* FISCHER, 1975 nom. nud., because no type species was designated). Most *Gnathopleura* species have the third antennal segment shorter than the fourth segment or the segments are of equal length and can be easily differentiated because of this reason. However, some species have the third segment longer than the fourth segment and this New World group keys out together with

the Afrotropical *Fischeralysia* gen.n. The *Gnathopleura* species can be separated as follows: the mandible has a small additional lobe on the ventral side of the first tooth, but no lobe on ventral side of mandible, the middle (= second) tooth of mandible acute, the metanotum with median carina, vein r of fore wing emitted near distal third of pterostigma, vein cu-a of fore wing postfurcal, vein m-cu of hind wing curved towards base of hind wing, vein M+CU of hind wing much longer than vein 1-M, the ovipositor sheath sparsely covered by moderately long setae, the mesosoma normal, the eyes glabrous and they are large brightly coloured species.

*Fischeralysia* gen.n. resembles the genus *Neurolarthra* FISCHER, 1975, but *Neurolarthra* has normal mandibles (i.e. with three teeth, and the second tooth acute), vein cu-a of fore wing (sub)interstitial, vein M+CU of hind wing longer than vein 1-M, the fore tarsus slender and distinctly longer than fore tibia, pleural sulcus distinct and completely crenulate, the median carina of the propodeum short and of the metanotum long, the fourth antennal segment longer than third segment, the eyes glabrous, the mesosoma not depressed and vein r of fore wing emitted from behind middle of pterostigma. The new genus is also similar to the genus *Adeluroloa* STRAND, 1928, but this genus has the mesosoma normal, not depressed, the second tooth of the mandible acute; vein cu-a of fore wing postfurcal, the tarsal claws less slender, the eyes glabrous, vein M+CU of hind wing longer than vein 1-M, and the first metasomal tergite subparallel-sided.

### *Fischeralysia polaszeki* sp.n.

(figs 1-14)

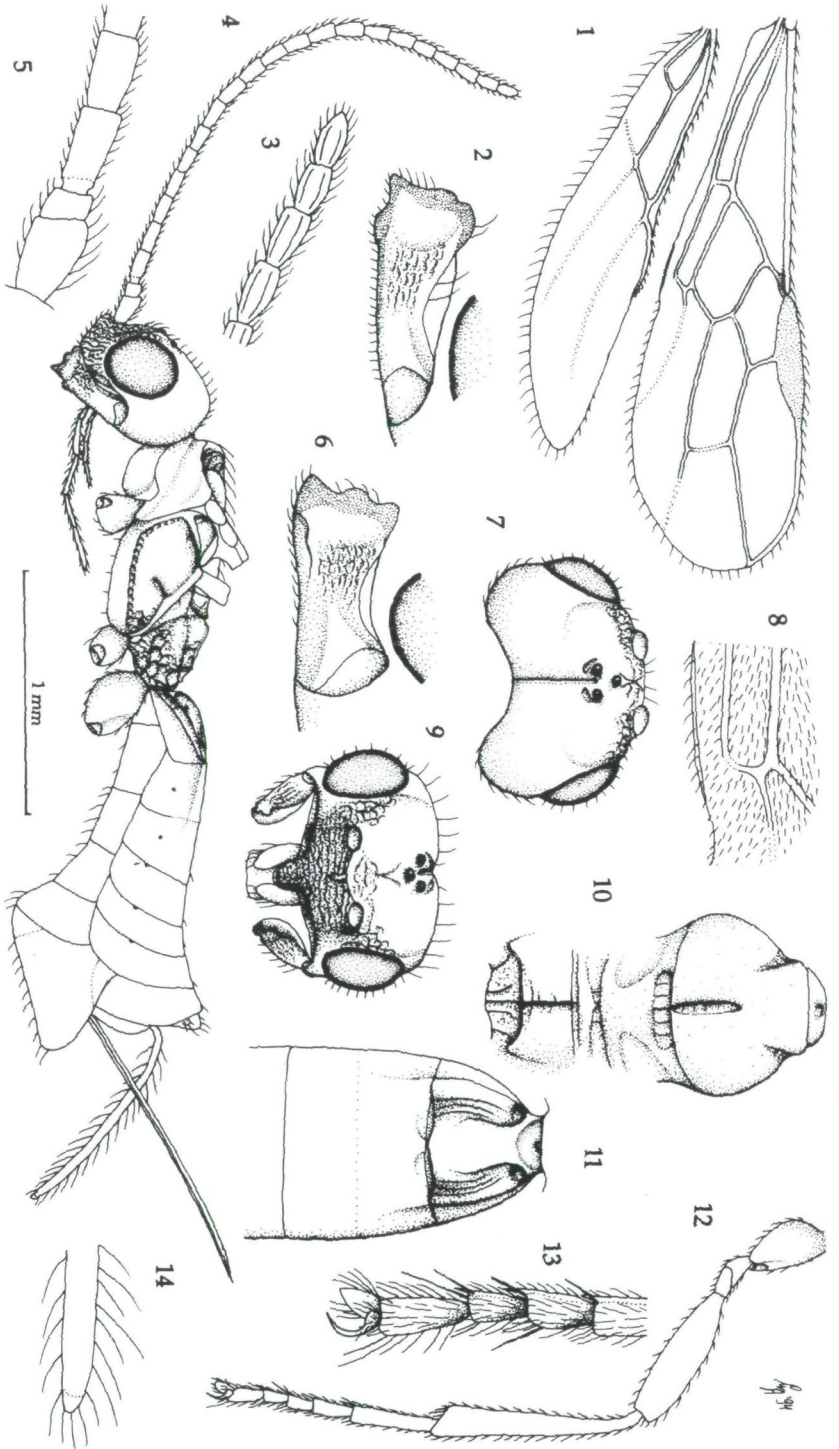
Material. Holotype, ♀ (RMNH), "Nigeria: Ibadan, IITA compound, 9-28.viii.[19]91, malaise [trap], [A.] Polaszek". Paratypes: 2 ♀♀ (RMNH), topotypic and same date.

Holotype, ♀, length of body 2.8 mm, of fore wing 2.2 mm.

Head. Antennal segments 22, length of third segment 1.1 times fourth segment, length of third, fourth and penultimate segments 2.1, 1.9 and 1.7 times their width, respectively (figs 3, 5); length of maxillary palp 1.2 times height of head, with 6 segments; labial palp with 4 segments; in dorsal view length of eye 1.3 times temple (fig. 7); temple subparallel-sided, rounded posteriorly, smooth; OOL : diameter of ocellus : POL = 24 : 4 : 5; frons flat, smooth, but rugulose antero-laterally (fig. 9); vertex flattened near stemmaticum, convex and smooth laterally; face convex, narrow and transversely rugose (fig. 1); clypeus convex, strongly protruding forward and finely rugose, its ventral margin distinctly differentiated; malar suture absent; length of malar space 0.1 times basal width of mandible; medial length of mandible 1.9 time its maximum width; mandible without oblique carina ventrally (figs 2, 6).

Mesosoma. Length of mesosoma 2.3 times its height; antescutal depression absent; side of pronotum smooth; mesopleuron smooth (beside precoxal sulcus); metapleuron smooth dorsally, and remainder coarsely reticulate-rugose (fig. 4); medio-posterior depression of mesoscutum very long and weakly sculptured (fig. 10); scutellum flat; surface of propodeum largely smooth dorsally and with some carinae posteriorly.

Wings. Fore wing: 1-SR medium-sized (fig. 1); r : 3-SR : SR1 = 5 : 15 : 22; 2-SR : 3-SR : r-m = 10 : 15 : 8; 1-SR+M nearly straight; m-cu parallel to 1-M posteriorly (fig. 1); first subdiscal cell closed. Hind wing: M+CU : 1-M = 12 : 16; R1 long.



Figs 1 - 14: *Fischeralysia polaszeki* gen. n. & sp. n., ♀, holotype. (1) wings; (2) mandible, full sight on fourth lobe; (3) apex of antenna; (4) habitus, lateral aspect; (5) basal segments of antenna; (6) mandible, full sight on first lobe; (7) head, dorsal aspect; (8) detail of vein CUTb of fore wing; (9) head, frontal aspect; (10) mesosoma, dorsal aspect; (11) first-third second metasomal tergites, dorsal aspect; (12) hind leg; (13) outer hind claw; (14) apex of ovipositor sheath. 1, 4, 12: 1 x scale-line; 2, 3, 5, 6, 8, 13, 14: 2.5 x; 7, 9 - 11: 1.4 x.

Legs. Length of femur, tibia and basitarsus of hind leg 3.3, 7.0, and 4.6 times their width, respectively; length of hind tibial spurs 0.15 and 0.25 times hind basitarsus; hind tarsus without very modified setae at ventral end of ventral row of setae (fig. 13); length of fore spur 0.6 times fore basitarsus.

Metasoma. Length of first tergite 0.8 times its apical width, its surface smooth except some rugae sublaterally, its dorsal carinae present in basal half of tergite, tergite flattened medially and concave medio-basally (fig. 11); laterope absent, but glymma deep; second and following tergites smooth; posterior half of metasoma depressed; length of ovipositor sheath 0.39 times fore wing, straight.

Colour. Black; scapus, pedicellus, mandible subapically, humeral plate, fore leg (except telotarsus), middle and hind leg (except coxae and telotarsi) yellowish-brown (but hind leg largely infuscate); palpi brown; remainder of antenna, tegula, metasoma (except first tergite basally), temple ventrally, most of mandible, pterostigma, parastigma and veins, telotarsi, middle and hind coxae dark brown; wing membrane infuscate.

Variation. Length of fore wing 2.0 - 2.3 mm, and of body 2.4 - 3.0 mm; antennal segments 22 (2 ♀♀); length of first metasomal tergite 0.8 - 0.9 times its apical width; length of ovipositor sheath 0.39 - 0.42 times fore wing; median carina of propodeum complete or absent posteriorly; colour as of holotype.

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