# Far Eastern Entomologist



# Дальневосточный энтомолог

Journal published by Far East Branch of the Russian Entomological Society and Laboratory of Entomology Institute of Biology and Pedology, Vladivostok

Number 1: 1-7

October 1994

Renyxidae fam. n. a new remarkable family of parasitic Hymenoptera (Pro-, ctotrupoidea) from the Russian Far East

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New family of Proctotrupoidea is described. Taxonomic position and relationships of Renyxidae fam. n. with other families are discussed. *Renyxa incredibilis* gen. et sp. n. are described from Primorskii krai.

KEY WORDS: Hymenoptera, Proctotrupoidea, taxonomy, new family.

М.А.Козлов. Renyxidae fam. n. - новое замечательное семейство паразитических перепончатокрылых (Hymenoptera, Proctotrupoidea) с Дальнего Востока России // Дальневосточный энтомолог. 1994. N 1. C. 1-7.

Описано новое семейство проктотрупоидных наездников. Обсуждается систематическое положение Renyxidae fam. n. Из Приморского края описан *Renyxa incredibilis* gen. et sp. n.

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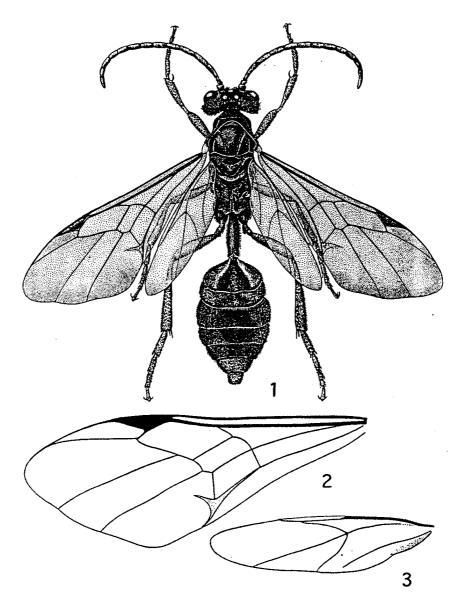
#### INTRODUCTION

Several years ago I received one specimen of giant Proctotrupoidea from the collection of Institute of Biology and Pedology, Vladivostok, for identification. After detail study I made conclusion that this specimen belongs to new genus and species and must be regarded as separate new family.

## FAMILY RENYXIDAE Kozlov, fam. n.

DIAGNOSIS. Distance between eye and lateral ocellus approximately 2 times as diameter of latter. Inner margins of eyes almost parallel, not convergented below. Male antennae 15-segmented including anellus (3rd segment). Pronotum well visible dorsally, not covered by mesoscutum medially (fig. 1). Mesoscutellum with one transversal groove posteriorly, latter with longitudinal ridges. Fore wing with closed 2nd cubital cell (2Cu) and widened and bifurcated anal vein apically (fig. 2). Hind wing with veins C+Sc+R, Sc+R and R anteriorly; widened median vein in the posterior third of wing; from broadening (on vein M) vein  $R_1$  reach to anterior margin of wing, M lies in the middle and  $Cu_1a$  reach to posterior border of wing (fig. 3). The number of tibial spurs 1-2-2. Tarsal claws pectinate. Gaster with elongate petiole; behind of petiolus segments not fused to syntergite or synsternite. Preapical (VIII) tergite with two spiracles; apical (IX) tergite with two cerci. Laterotergites very broad. Gaster weakly laterally compressed.

TAXONOMIC POSITION AND RELATIONSHIPS. New family belongs to group of families Heloridae, Peradeniidae, Austroniidae and Monomachidae in having antennal scape very short; antennae moved off clypeus: vein Rs of fore wing not bifurcated apically; fore wing with pterostigma; gaster with narrow petiole; VIII tergite with two spiracles.



Figs. 1-3. Renyxa incredibilis Kozlov, gen. et sp. n., male. 1) general view; 2) fore wing; 3) hind wing.

Renyxidae more related to Heloridae from one hand and Roproniidae from other one. The presence of antennal anellus is synapomorpy of two proctorupoid families: Heloridae and Renyxidae; pectinate claws is synapomorphy of three proctotrupoid families: Renyxidae, Heloridae and Roproniidae. By fore and hind wing venation and gastral segmentation Renyxidae is more plesiomorphic than Heloridae, Roproniidae and other recent proctotrupoid families.

GENUS INCLUDED. *Renyxa* Kozlov, gen. n. DISTRIBUTION. South of Russian Far East (Primorskii krai).

#### Genus Renyxa Kozlov, gen. n.

Type species: Renyxa incredibilis Kozlov, sp. n.

ETYMOLOGY. The generic names is feminine, originated from handwriting Russian "zenyxa" meaning nonsense.

DIAGNOSIS. Male (fig. 1). Head hypognathous, transversal dorsally. Occipital carina well developed, reach the mandibular base from both sides. Diameter of lateral ocellus approximately 2 times less than distance between it and eye. Antennal sockets are in the middle of frons on line of transversal diameter of eyes, antennal socket margins rised over frontal surface, interspace between sockets a little bit more than socket diameter. Frons convex weakly, almost plain. Eyes large, oblongato-oval without microtrichiae; inner margins almost parallel, slightly divergent below. Clypeus narrow. Mandibles large, wide as clypeal length, 3-dentate. Maxillar palps 4-segmented, labial palps 3-segmented. Antennae short, 15-segmented including anellus; radicula short transversal; antennal scape short, shorter than width; transversal discoform thin anellus is between transversal pedicellus (2nd segment) and oblongate 4th segment; 4th-15th segments unmodified, without basiconical and placoid sensillae or ridges.

Pronotum not covered by mesoscutum dorsally, with two transversal carinae anteriorly, posterior part lower than anterior one. Mesoscutum with notauli and parapsidal furrows. Mesoscutellum with large median semirounded fovea anteriorly, swollen disc behind of it, laterad of fovea (near tegulae) with acute lamellate lobes; laterad of disc with emargination. Propodeum emarginated laterally. Mesopleurae without prepectus and acetabular carina. Gastral petiolus articulate with propodeum above

posterior coxae. Venation of fore and hind wings see under family. Legs slender, distance between fore and middle coxae more than length of coxa, middle and hind coxae approached; trochanters 2-segmented; tarsi 5-segmented, claws pectinate, arolium well developed.

Gaster slightly compressed laterally, not wider than thorax; II tergite and II sternite fused to thin oblongate petiolus, approximately 3 times narrow as thoracic width; III-IX tergites and III-VII sternites not fused; VIII and IX sternites not visible below; genitalia not extruded; IV-VIII tergites transversal; VII sternite narrowed posteriorly with median narrow protuberance apically.

Female unknown.

## Renyxa incredibilis Kozlov, sp. n.

MATERIAL. Holotype, male, Russia: Primorskiy krai, Partizansk, 6.VI 1981 (A. Kupianskaya) (deposited in Zoological Institute, St.-Petersburg).

DESCRIPTION. Male. Body length 13.5 mm. Head transversal, almost 4.7 times wide as long. Distance between eye and lateral ocellus 2 times as diameter of latter; postocellar distance 2 times as one between lateral and anterior ocelli. Eyes oval, longitudinal diameter 2 times as transversal one. Distance between eyes (on antennal sockets line) approximately 7 times as the eye transversal diameter. Antennae 15segmented including anellus. Radicula 2 times shorter than scape; scape transversal approximately 1.5 times as wide as long; 2nd segment (pedicellus) almost 2 times narrow as scape, slightly wider than anellus and 4th segment; anellus discoform strongly transversal, weakly visible (even under magnification 56x); 4th-14th segments oblongate, gradually shorter from 4th to 14th; 4th segment 4 times as long as wide and 2 times long as 14th, 14th segment 2 times as long as wide, 15th segment 3 times as long as wide and 1.5 times long as 14th one. Head with punctures. Frons, vertex and occiput with long silvery hairs; these hairs below antennae turned down, above antennae upwards, on vertex and occiput ahead. Antennae and labial and maxillar palps with short hairs. Vertex behind lateral hairs with narrow arcuate emargination.

Thorax 1.8 times as long as wide between tegulae; pronotum 3 times as short as wide between tegulae; mesoscutum longest but transversal, 1.3 times as wide as long, 2 times long as pronotum, 1.3 times long as

mesoscutellum, 6 times long as metanotum; propodeum 4 times long as metanotum, almost 1.7 times as wide as long. Wings long, not reach gastral apex. Fore wing 2.8 times as long as maximum width, venation see fig. 2. Cell IM almost 4 times as long as wide; cell 2Cu 2.5 times as long as wide (along vein  $Cu_1a$  and 2 times as long as wide (along vein  $Cu_1b$ ); cell  $R_1$  3 times as long as wide (along vein m-cu); cell  $2R_1$ + $3R_1$  3 times as long as maximum width; pterostigma 3.5 times as long as wide. Hind wing 4 times as long as maximum width, with anal lobe, venation see fig. 3; vein C+Sc+R adjoined to anterior wing margin approximately 1.3 times long as vein Sc+R until conjugation with Rs; part of vein  $R_1$  before conjugation with anterior wing margin approximately 1.5 times short as  $R_1$  after conjugation.

Legs usual, trochanters 2-segmented, claws pectinate, metatrsi long as combined lengths of next three segments. Fore spur bifurcated apically, inner margin with transparent lamella. Thorax with punctures and long hairs; pronotum with median transversal carina; mesoscutum with trasversal carinae between notauli anteriorly and parapsidal furrows in posterior half; mesoscutellum fovea with more weak and sparse punctures anteriorly; metanotum with emargination laterally, latter with short longitudinal ridges; propodeum with lateral proection, hind face of proection with spiracle; posterior propodeal half with longitudinal lateral carinae; latters with propodeal hind margin and upper sinuate transversal carina form pentagon. Posterior pronotal half with longitudinal carinae laterally. Mesonotum below forms one surface with ventral side of middle coxae. Mesopleurae and metapleurae with punctures, mesopleural emargination with short oblique ridges. Metanotal sclerite below divided in equal parts by longitudinal emargination, latter with short transversal ridges, anterior metanotal half with smooth grooves likes pasrapsids.

Gaster longer as combined lengths head and thorax; petiolus 3.2 times as long as wide, slightly shorter than III tergite; latter transversal, almost 4 times long as IV tergite, almost 3.5 times short as basal width; V tergite transversal, as long as IV tergite, almost 5 times short as basal width; VI and VII tergites transversal, almost equal length, VII sternite almost 2 times long as VII tergite. VIII tergite slightly shorter than IX tergite, almost 2 times short as basal width. IX tergite oblongate, almost 2 times long as wide. Gaster with long turned back hairs. Petiolus with small grain sculpture. III tergite with punctures and longitudinally drawn. IV and VI tergites with punctures. V, VIII and IX tergites longitudinally

drawn. Laterotergites wide with punctures. Sternites with punctures medially and smooth laterally where they covered by laterotergites.

Body black, antennae, legs, veins and laterotergites reddish-brown, wins slightly brownish.

Female unknown.

DISTRIBUTION. Russia: Primorskii krai [Maritime Province or Primorye Region].

#### **ACKNOWLEDGMENTS**

I am much indebted at first to Dr. A. Kupianskaya who collected this specimen, Prof. V.I.Tobias and Prof. A.P.Rasnitsyn for the discussion of position of new family among Hymenoptera and Dr. A.F.Emeljanov who proposed original generic name.

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