

## THE NEW SPECIES OF PROTURA FROM CENTRAL EUROPE

Von Josef NOSEK

Institute of Virology Czechoslovak Academy of Sciences, Bratislava

Received September 25<sup>th</sup>, 1967

Five new species of Protura are previously described in this paper: *Eosentomon gisini* sp.n., *Hesperentomon haybachae* sp.n., *Proturentomon conděi* sp.n., *Acerentulus palissai* sp.n. and *Acerentulus ruseki* sp.n.

The more detailed descriptions will be published in author's monography "The European Protura".

### *Eosentomon gisini* sp.n.

This species is extremely close to *E. transitorium*. The only real difference is in *gisini* the foretarsus which has short and broadened d sensilla.

Description: Mouthparts as usual (Fig. 3), clypeal apodeme good visible (Fig. 4). The foretarsus is shown in figs 1 and 2: Ratio of sensillae is following: a : b : x : c : d : e : f<sub>1</sub> : f<sub>2</sub> : g as 13 : 20 : 28 : 20 : 13 : 20 : 16 : 10 : 20; a' : b' : c' as 25 : 19 : 15. BS - 1,0, TR - 5,8, EU - 0,9. Chaetotaxy is similar that of *E. transitorium*. The female squama genitalis (Fig. 9) very much like that of *transitorium*. Length of body - 1200 μ, foretarsus without claw - 86 μ, claw - 15 μ.

Locality in which the animal was found: W-Slovakia, Štitáre near Nitra 3.V.1967 leg. author.

Holotype ♀ and some paratypes kept in author's collection.

Named in honour of - Dr. H. GISIN, Genève who has contributed extensively to knowledge of European Collembola and Protura.

Explanation to the figures of Plate I: *Eosentomon gisini* sp.n. ♀ holotype: Fig. 1. Foretarsus in exterior view; - Fig. 2. Foretarsus in interior view. - Fig. 3. Forepart of head with mouthparts. - Fig. 4. Clypeal apodeme. - Fig. 5. Pseudoculus. - Fig. 6. Spiracle of mesothorax. - Fig. 7. Tarsus of third leg. - Fig. 8. Chaetotaxy of left side of tergite VII. - Fig. 9. Female squama genitalis. (enlargment 100 x 10).

### *Hesperentomon haybachae* sp.n.

This species in position and length of sensillae of foretarsus is closely related to *H. conděi* and differs from it in the filamento di sostegno which is much like to that of *H. montanum*.

Description: Mouthparts of *Hesperentomon* type. The foretarsus with filiform sensillae. Ratio of sensillae in exterior view a : b : c : d : e : f : g as 34 : 24 : 22 : 29 : 26 : 19 : 29. the ratio of sensillae in interior view a' : b' : c' : c' as 19 : 17 : 32 : 32. BS - 0,9, TR - 4,0, EU - 0,18. Th II with 8 setae. Length of foretarsus without claw - 107 μ, claw - 27 μ, length of body - 1400 μ.

Holotype ♀ kept in author's collection. Locality in which the animal was found: Austria, Steinwandklamm bei Furth südl. Weissenbach a. Triesting. VII.1966 leg. Franz. (3 ♀).

Named in honour of Dr. G. HAYBACH, Institute for Soil Research Vienna.

Explanation to the figures of Plate II: *Hesperentomon condéi* ♀  
holotype: Fig. 1 Foretarsus in exterior view. - Fig. 2. Foretarsus in interior view. -  
Figs 3 - 4. Maxillary and labial palpi. - Fig. 5. Pseudoculus. - Fig. 6. Filamento di  
sostegno. - Fig. 7. The second abdominal leg. - Fig. 8. The third abdominal leg. -  
Fig. 9. Pleural area VI. - Fig. 10. The lid on terg. VIII. - Fig. 11. Female squama  
genitalis.

*Proturentomon condéi* sp.n.

The mouthparts, filamento di sostegno and pseudoculus are of the genus-type (Figs  
3 - 5). The Foretarsus without  $t_1$  sensilla. TR - 2,8, EU - 0,125, the ratio of sensillae  
in exterior view - a : b : c : d : e : f : g as 14,5 : 13,5 : 15,0 : 18,0 : 14,5 : 9,0  
- 15,5; the ratio of sensillae on interior view a' : b' : c' as 12,5 : 12,5 : 15,0  
(Figs 1 and 2). The lid on terg. VIII with 8 teeth, the hind margin of sternite and pleu-  
rite VIII finely serrated (Figs 9 and 10). The squama genitalis ♀ with two, slightly  
pointed knob-like acrostyli (Fig. 11). Length of foretarsus without claw - 46  $\mu$ , length  
of claw - 16,5  $\mu$ , length of body - 690  $\mu$ .

Locality in which the animal was found: Martinswand near Innsbruck, 2.VI.1964  
leg. THALER.

Holotype ♀ kept in author's collection, paratype ♀ in collection of Dr. HAUSER,  
Institute for Zoology, University Innsbruck.

Named in Honour of Prof. Dr. B. CONDE, Nancy, eminent specialist and authority  
in Protura.

Explanation to the figures of Plate III: *Proturentomon condéi* ♀ holotype:  
Fig. 1. Foretarsus in exterior view. - Fig. 2. Foretarsus in interior view. - Figs 3 - 4.  
Forepart of head with mouthparts: with maxillary and labial palpi. - Fig. 5. Pseud-  
oculus. - Fig. 6. Filamento di sostegno. - Fig. 7. - Abdominal leg. II. - Fig. 8. Tarsus  
of third leg. - Fig. 9 The left half of terg. VIII. - Fig. 10. The right half of sternite  
VIII and pleurite. - Fig. 11. Female squama genitalis.

*Acerentulus palissai* sp.n.

This species is characterized by enorm long sensillae on exterior side of foretarsus  
which phenomenon is unique in European species. It belongs to the "confinis" group.

Description: The mouthparts of *Acerentulus*-type. Ratio of sensillae on foretar-  
sus in exterior view - a : b : c : d : e : f : g as 57 : 42 : 53 : 42 : 36 : 40 : 33; ratio  
of sensillae in interior view a' : b' : c' as 32 : 39 : 36,5. BS - 0,34, TR - 3,6.  
EU - 0,24. The squama genitalis is very distinctly tripartite with long pointed acrostyli  
(Fig. 10). Chaetotaxy of terg. VII is characterized by missing of  $a_1$  and  $a_3$  setae.  
Length of foretarsus without claw - 94  $\mu$ , length of claw - 26  $\mu$ , length of body - 1100  $\mu$ .

Locality in which the animal was found: Berlin, Potsdam Park Sansouci, 16. XI.  
1964 leg. JOHNSEN.

Holotype ♂ and allotype ♀ kept in author's collection, some paratypes kept in col-  
lection of Dr. PALISSA in Zoological Institute of Humboldt-University Berlin.

Explanation to the figures of Plate IV: *Acerentulus palissai* ♂ holotype:  
Fig. 1. Foretarsus in exterior view. - Fig. 2. Foretarsus in interior view. - Fig. 3. Maxillary palp. - Fig. 4. Labial palp. - Fig. 5. Pseudoculus. - Fig. 6. Filamento di sostegno - Fig. 7. Tergal comb VIII. - Fig. 8. Chaetotaxy of right half of tergum VII. - Fig. 9. Squama genitalis of male. - Fig. 10. Squama genitalis of female (allotype).

*Acerentulus ruseki* sp.n.

This species is closely related to *Acerentulus trägårdhi* but differs from it in the form of labial sensilla which is rounded at the tip, and in BS and TR.

Description: In the foretarsus the shape and length of the sensillae are almost the same as in *A. trägårdhi* but very distinctive difference is found in the labial sensilla which are club-shaped (Fig. 4). Ratio of sensillae on foretarsus in exterior view - a : b : c : d : e : f : g as 26,5 : 71 : 26,5 : 23,5 : 29,0 : 38,5 : 28,0; ratio of sensillae in interior view a' : b' : c' as 23 : 24 : 24. BS - 0,5, TR - 3,8, EU - 0,21. Squama genitalis is very distinctly tripartite with long pointed acrostyli. Chaetotaxy is the same as of *A. trägårdhi*. Length of foretarsus without claw - 63  $\mu$ , length of claw - 16,5  $\mu$ , length of body - 800  $\mu$ .

Locality in which the animal was found: Frauenstein bei Mödling, Austria inf. VII. 1960 leg. G. HAYBACH.

Holotype ♀ and paratypes kept in author's collection.

Named in honour of Dr. RUSEK, Prague who has contributed extensively to knowledge of Central European Apterygota.

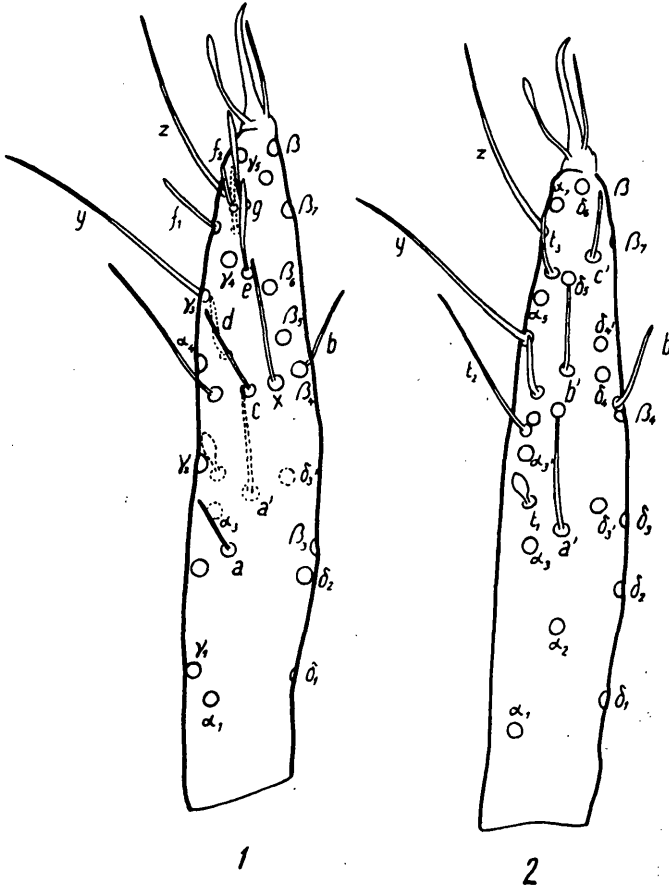
Explanation to the figures of Plate V: *Acerentulus ruseki* ♀ holotype:  
Fig. 1. Foretarsus in exterior view. - Fig. 2. Foretarsus in interior view. - Fig. 3. Maxillary palp. - Fig. 4. Labial palpi. - Fig. 5. Pseudoculus. - Fig. 6. Filamento di sostegno. - Fig. 7. Pleural area VII. - Fig. 8 Comb VIII.

Reference

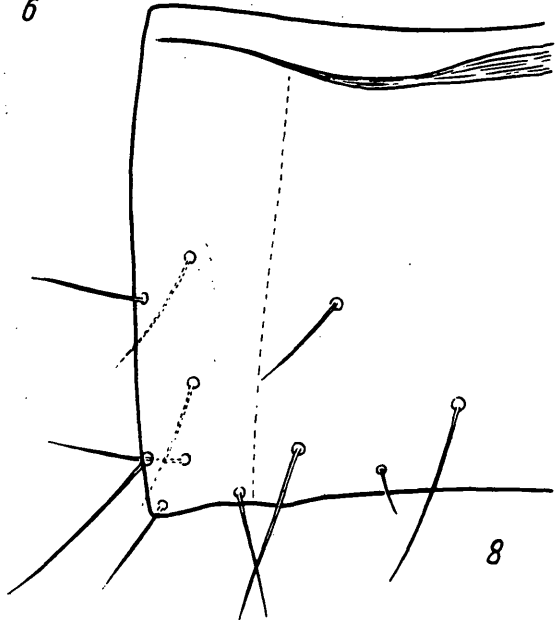
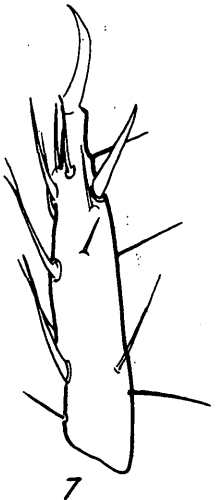
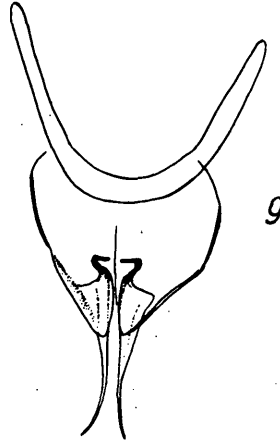
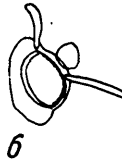
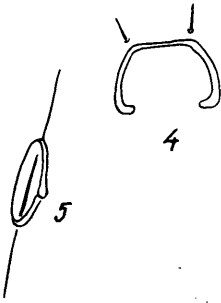
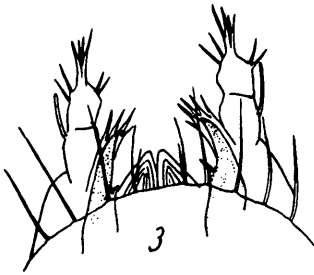
TUXEN, S. L. 1964. The Protura. Hermann Paris 360 pp.

Warm thanks are due to Prof. Dr. S. L. TUXEN, Zoological Museum Copenhagen and Prof. Dr. B. CONDE, Faculté des Sciences, Zoologie Approfondie, Nancy for their kindly help.

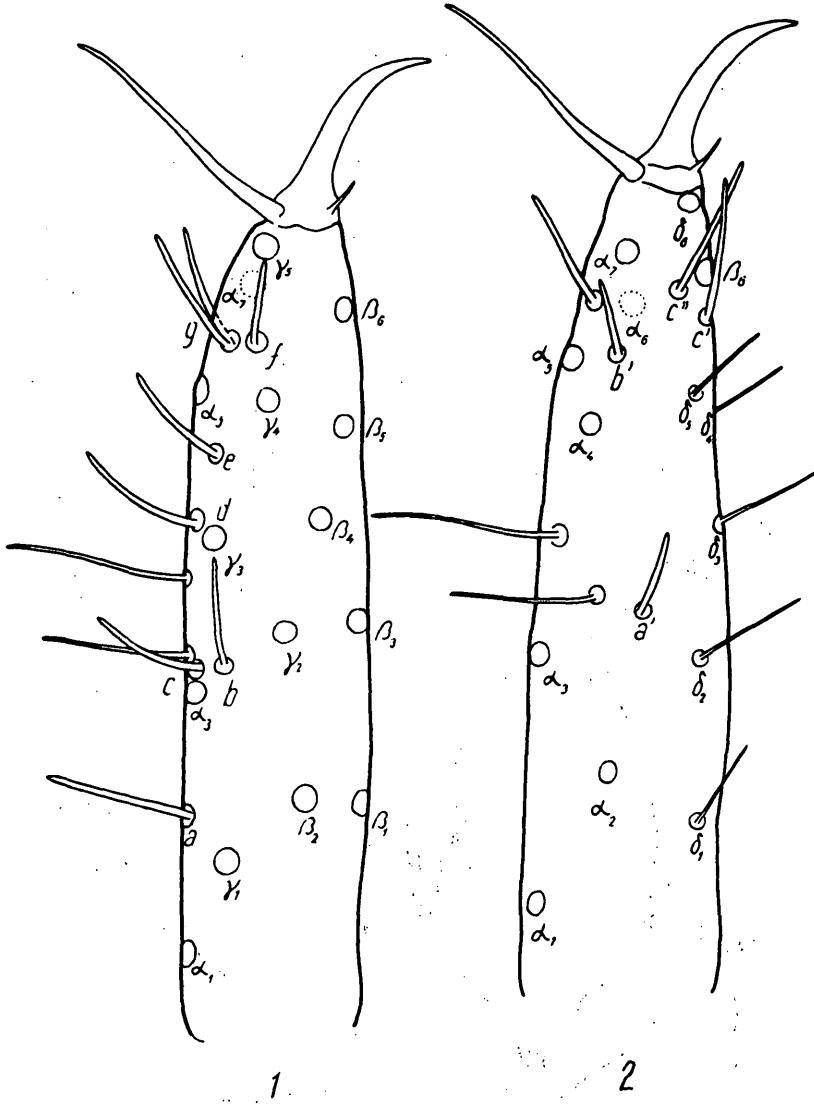
PI I



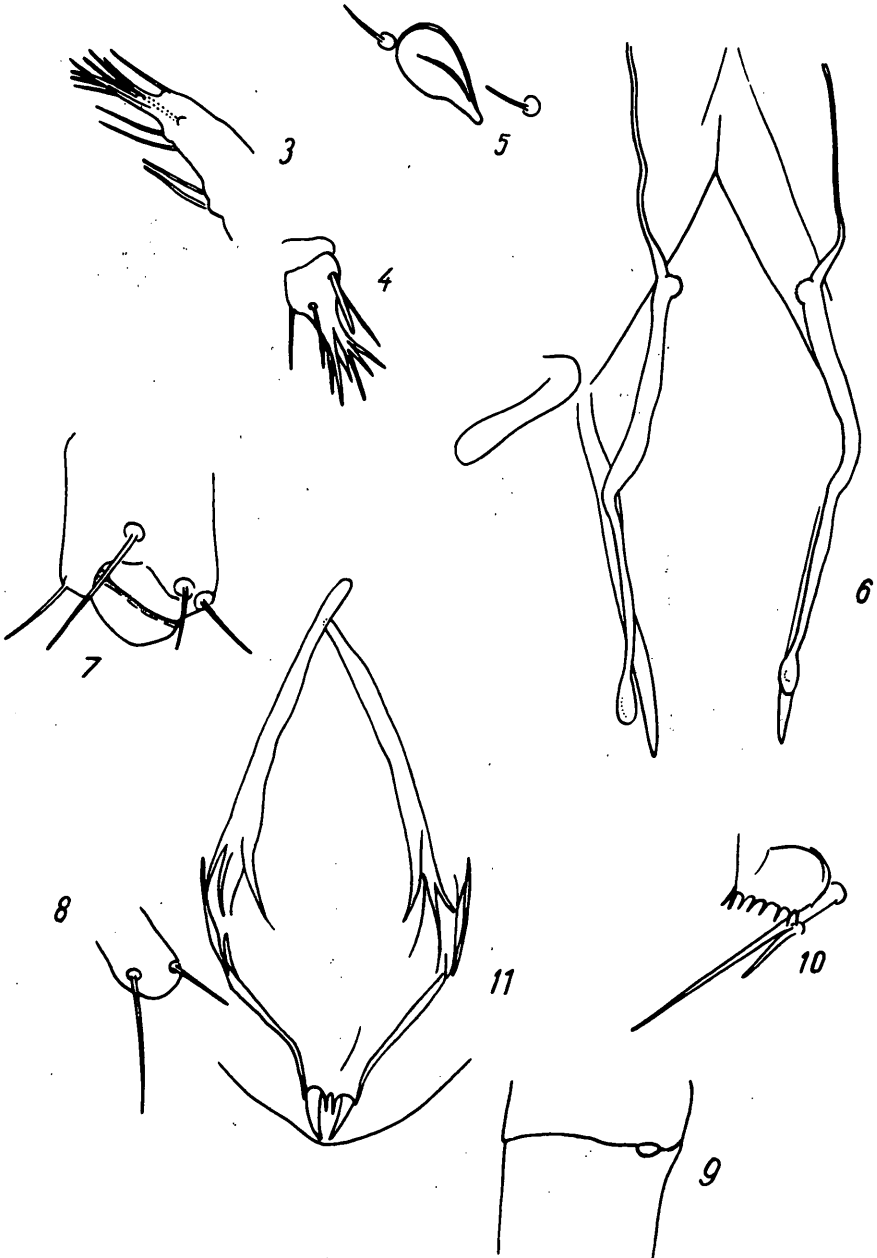
Pl I



Pl III



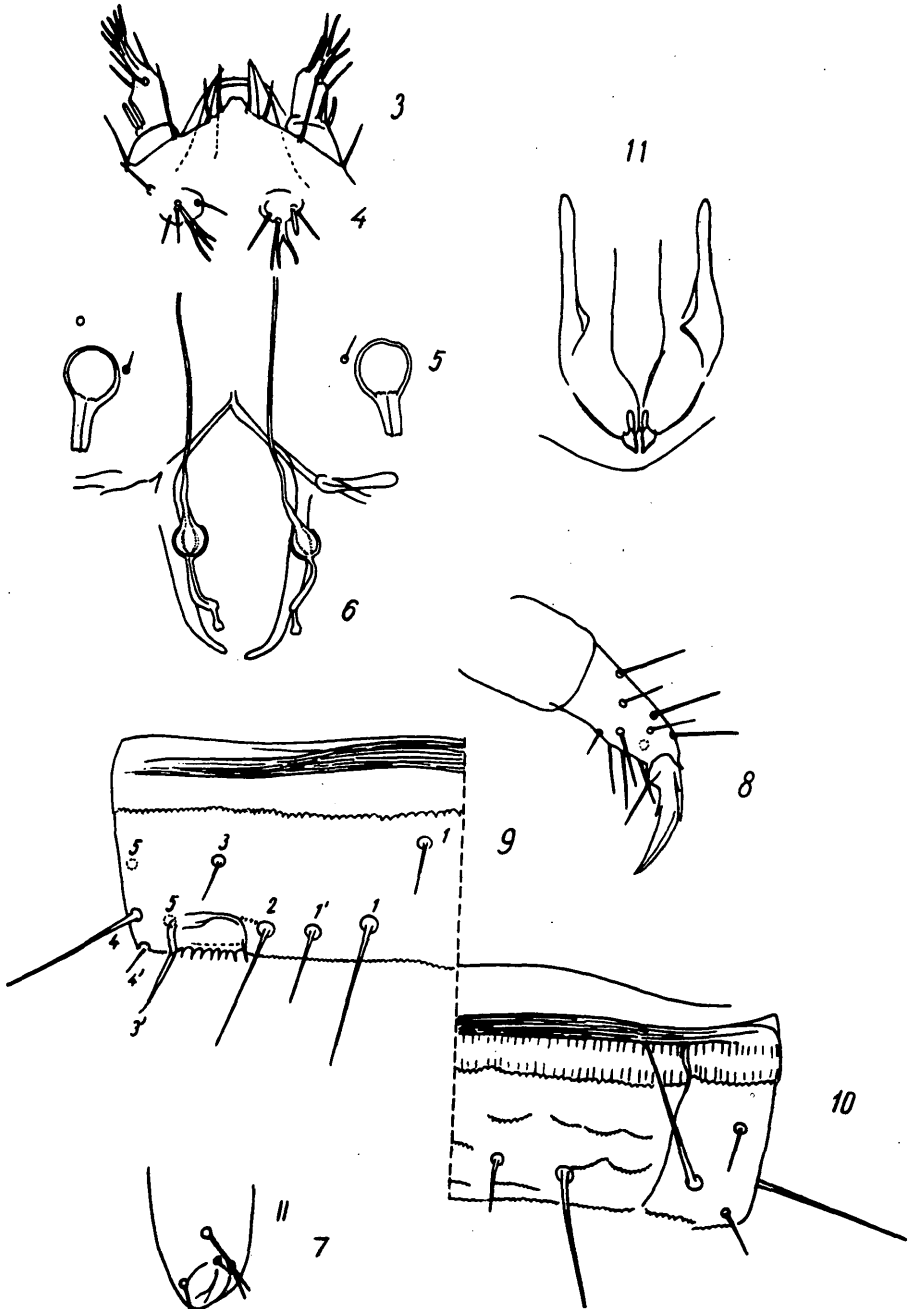
Pl II



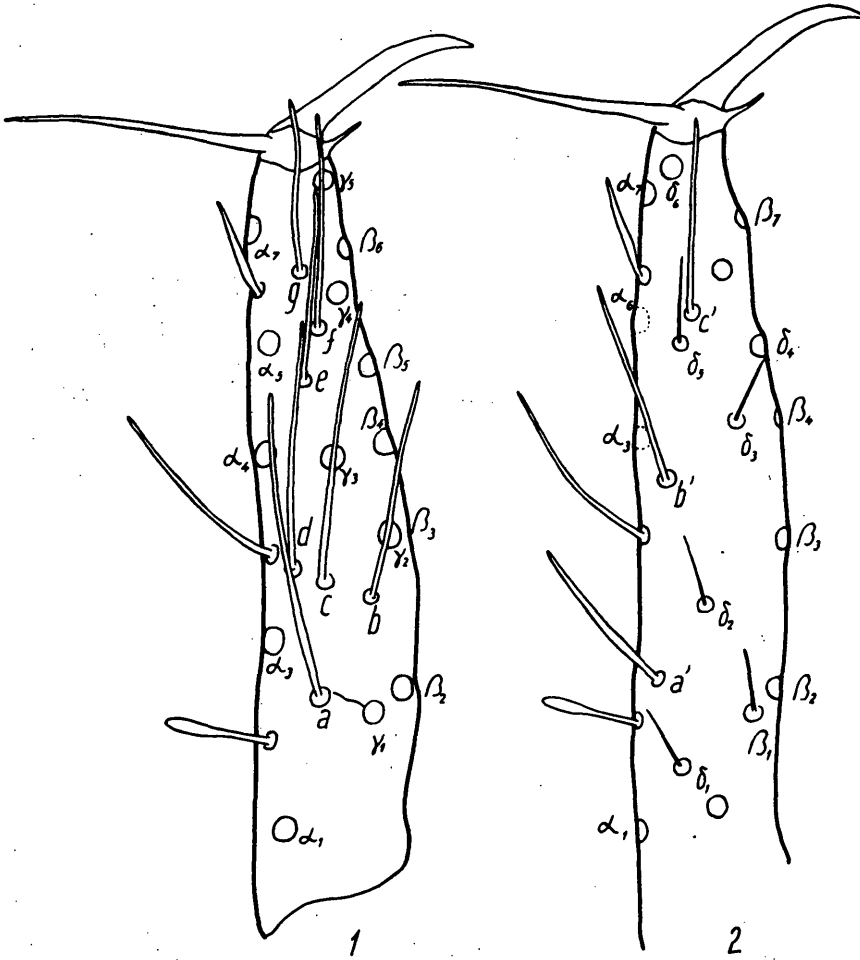




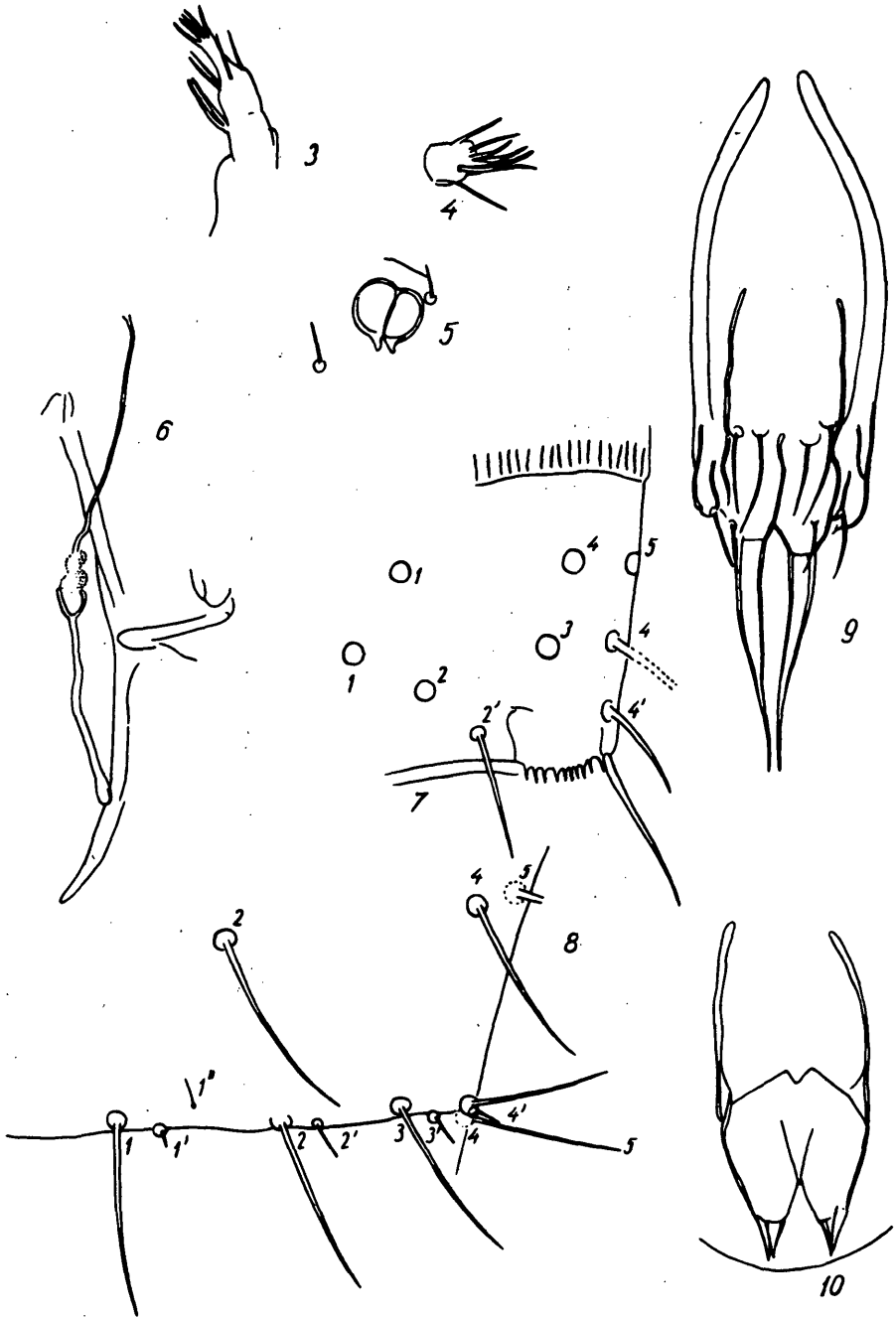
Pl III



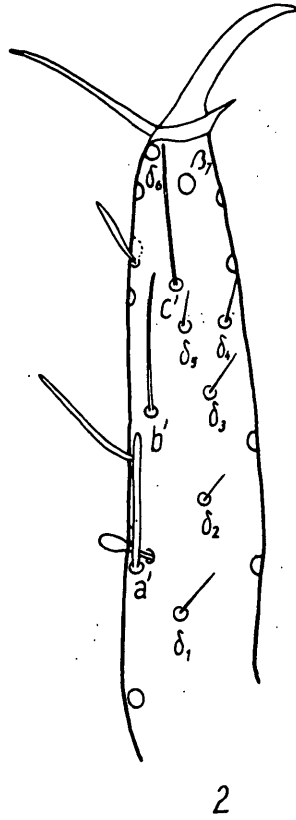
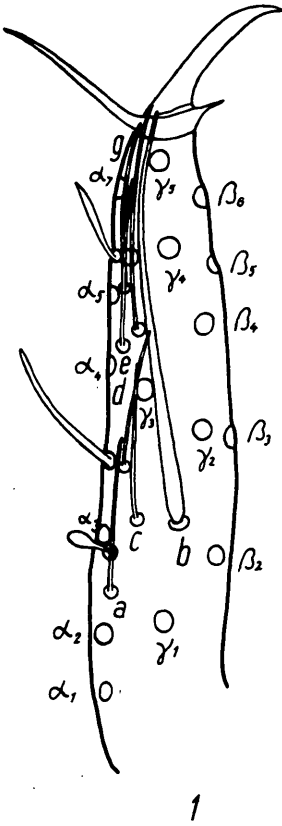
PI IV



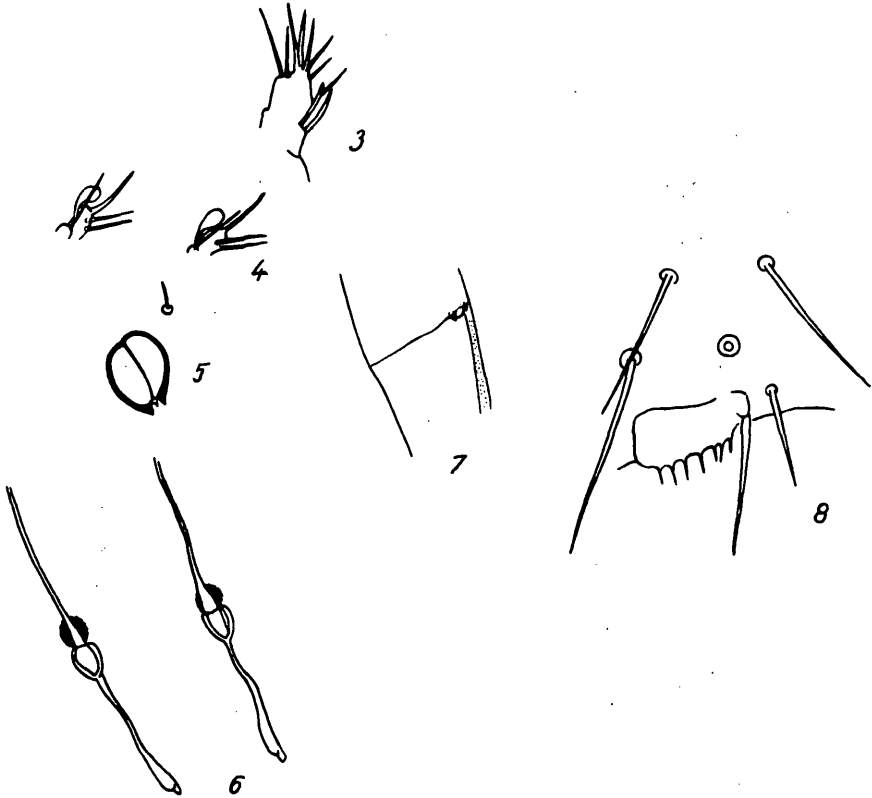
Pl IV



Pl V



Pl V



# ZOBODAT - [www.zobodat.at](http://www.zobodat.at)

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Zeitschrift der Arbeitsgemeinschaft Österreichischer Entomologen](#)

Jahr/Year: 1967

Band/Volume: [19](#)

Autor(en)/Author(s): Nosek Josef

Artikel/Article: [The new species of Protura from Central Europe. 76-88](#)