

# SCHIZOCYRTILLUS JOSEFINAE N. SP. OF THE FAMILY CELAENOPSIDAE (ACARI, ANTENNOPHORINA) FROM POLAND

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ACARINA, GAMASIDA,  
CELANOPSIDAE, TAXONOMY

SUMMARY : This work presents the description of a new species of the genus *Schizocyrtillus*, whose one male and two female individuals were found in antnests and under bark in the area of the Bialowieza National Park, Poland.

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ZUSAMMENFASSUNG : Diese Arbeit stellt eine Beschreibung der neuen Art aus der Gattung *Schizocyrtillus* dar. Ein Männchen und zwei Weibchen wurden in Amaisen-nest und unter Baumrinde in dem Bialowieza National Park (Polen) gefunden.

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RÉSUMÉ : Dans cet article, une nouvelle espèce du genre *Schizocyrtillus* est décrite. Un mâle et deux femelles ont été trouvés dans les fourmilières et sous les écorces dans le Parc National de Bialowieza, en Pologne.

## INTRODUCTION

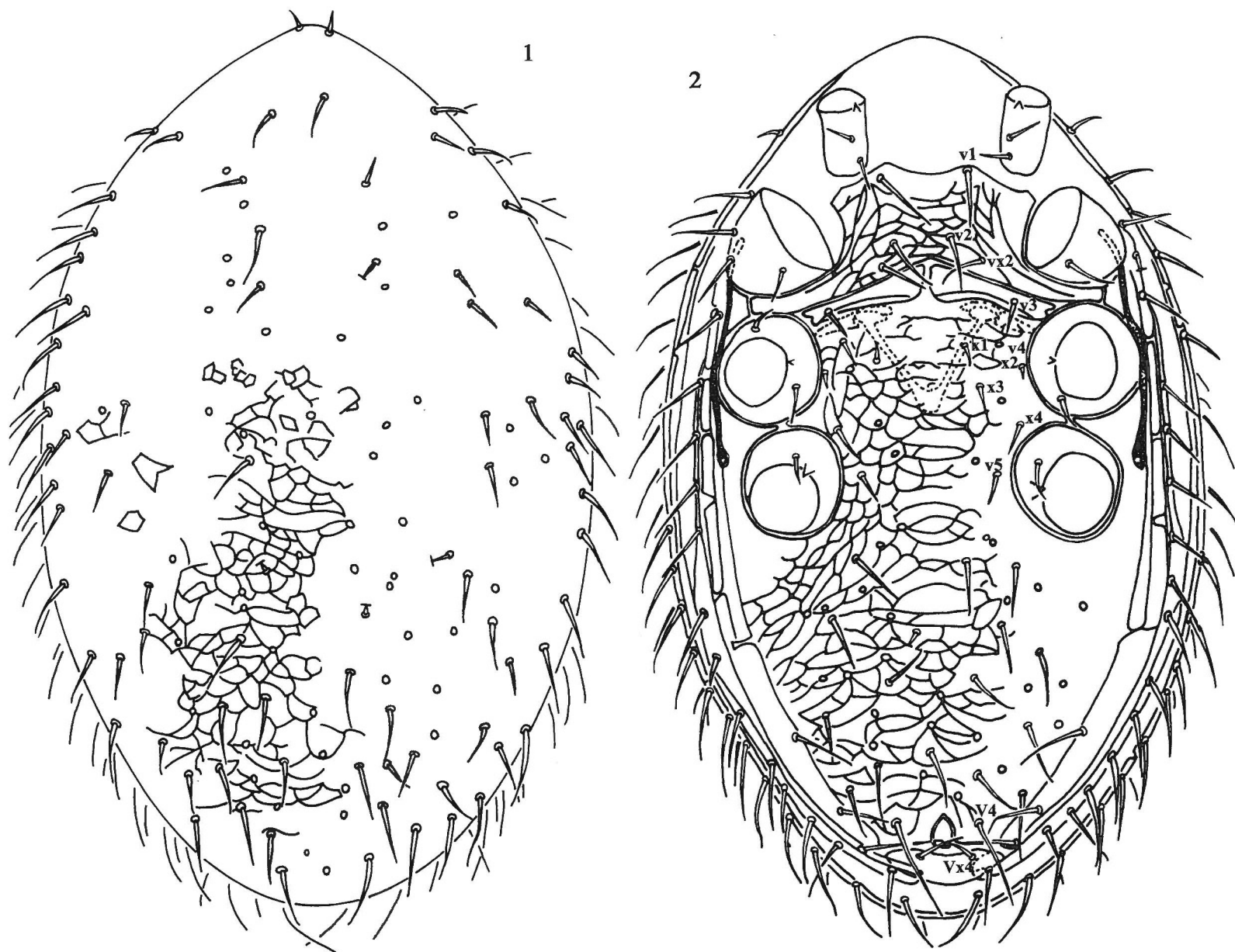
Representatives of the family Celaenopsidae are encountered in various microhabitats, but they are most frequently found in the feeding grounds of bark beetles and under the bark of dead trees (KINN 1970). Nymphs are encountered on rodents or in their nests (BREGETOVA 1977). Mites of this family may occur in litter, rotten wood, tree-hollows, anthills, moss and sporocarp (GWIAZDOWICZ 1998). The Celaenopsidae genus *Schizocyrtillus* was described by KINN (1970), who found its representatives in the feeding grounds of Scolytidae under the bark of *Pinus monophylla* Torr et Frém. in California. In the Palaearctic region was described by KHAUSTOV (1999) *Schizocyrtillus rarus*.

During acarological research in the Bialowieza National Park, several individuals of a new species of *Schizocyrtillus* were found under bark and in an anthill (GWIAZDOWICZ 1998). The species is described below. Chaetotaxy and number of setae used after HIRSCHMANN (1959, 1961). Measurements are in  $\mu\text{m}$ .

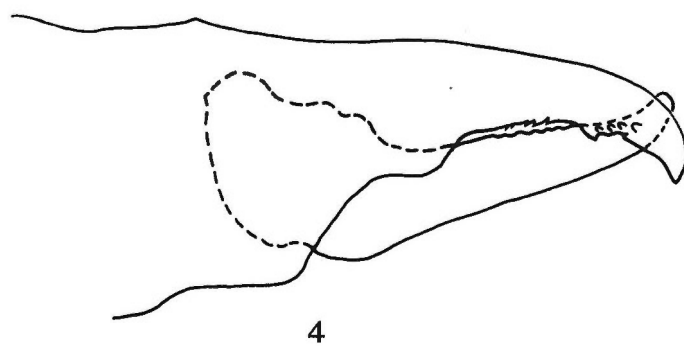
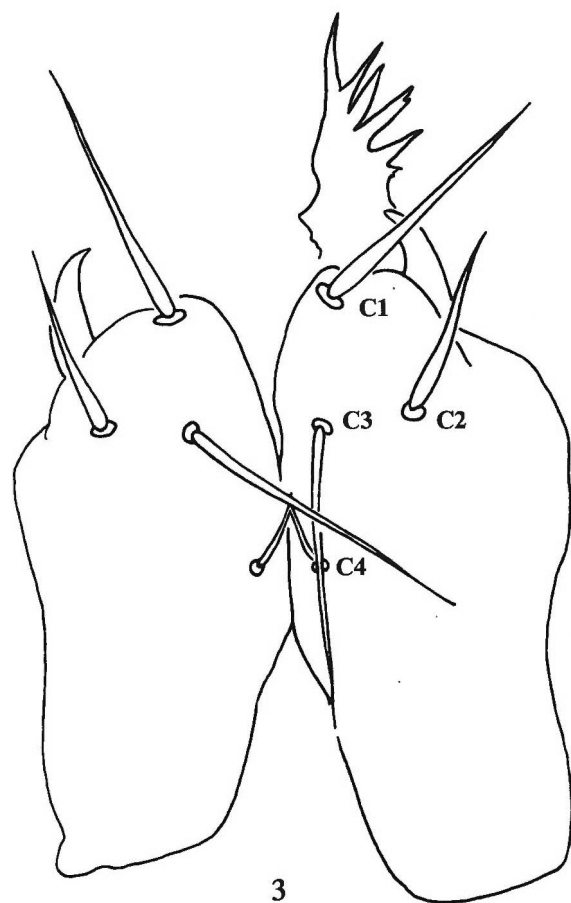
## *Schizocyrtillus josefinae* n. sp.

Female : Idiosomal dorsum (FIG. 1) well sclerotized, length 610 to 650, width 380 — 420. Body widest at level of coxae IV. Dorsal side markedly convex and covered by single holodorsal shield with more than 100 simple setae. Setae situated posteriorly markedly longer than those situated anteriorly. Holodorsal-

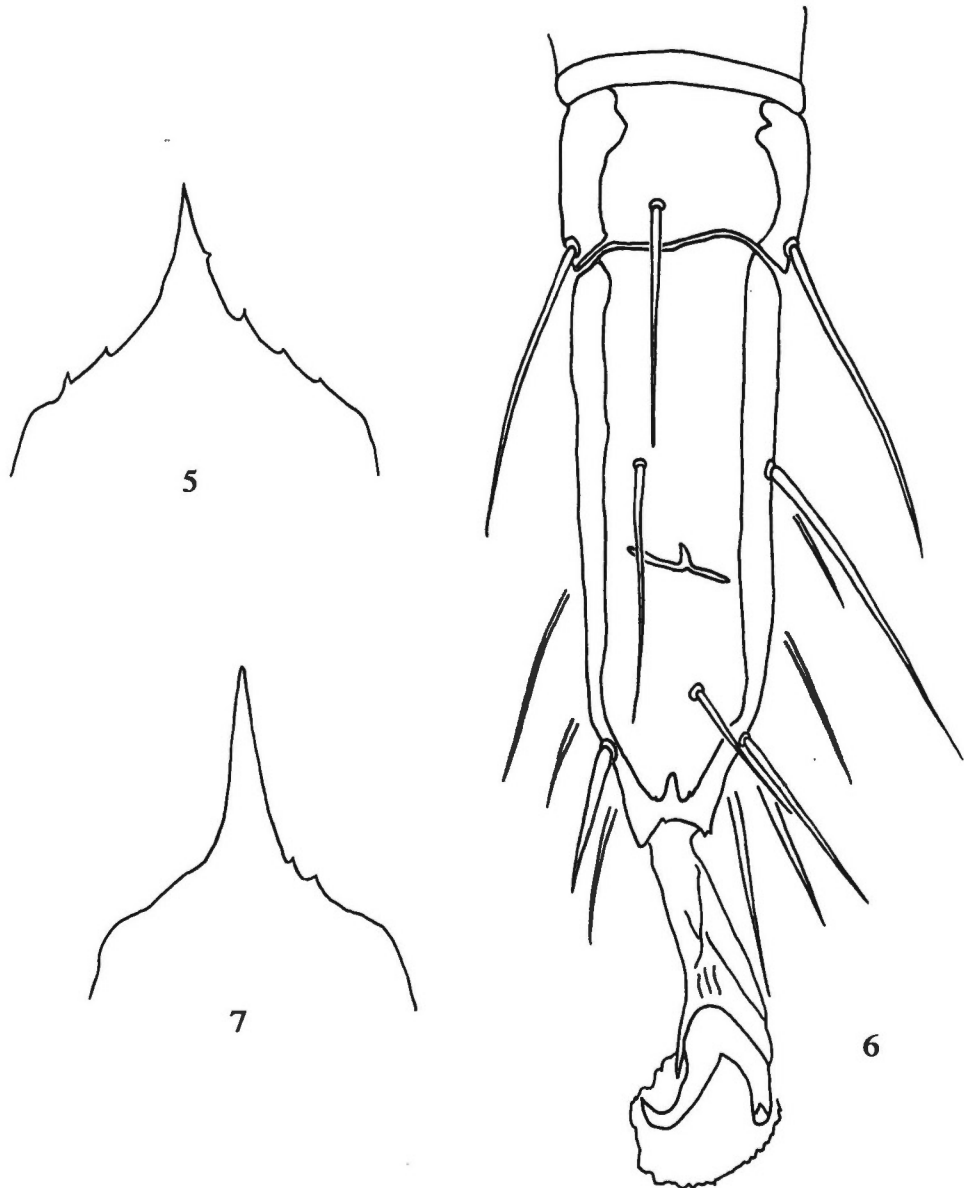
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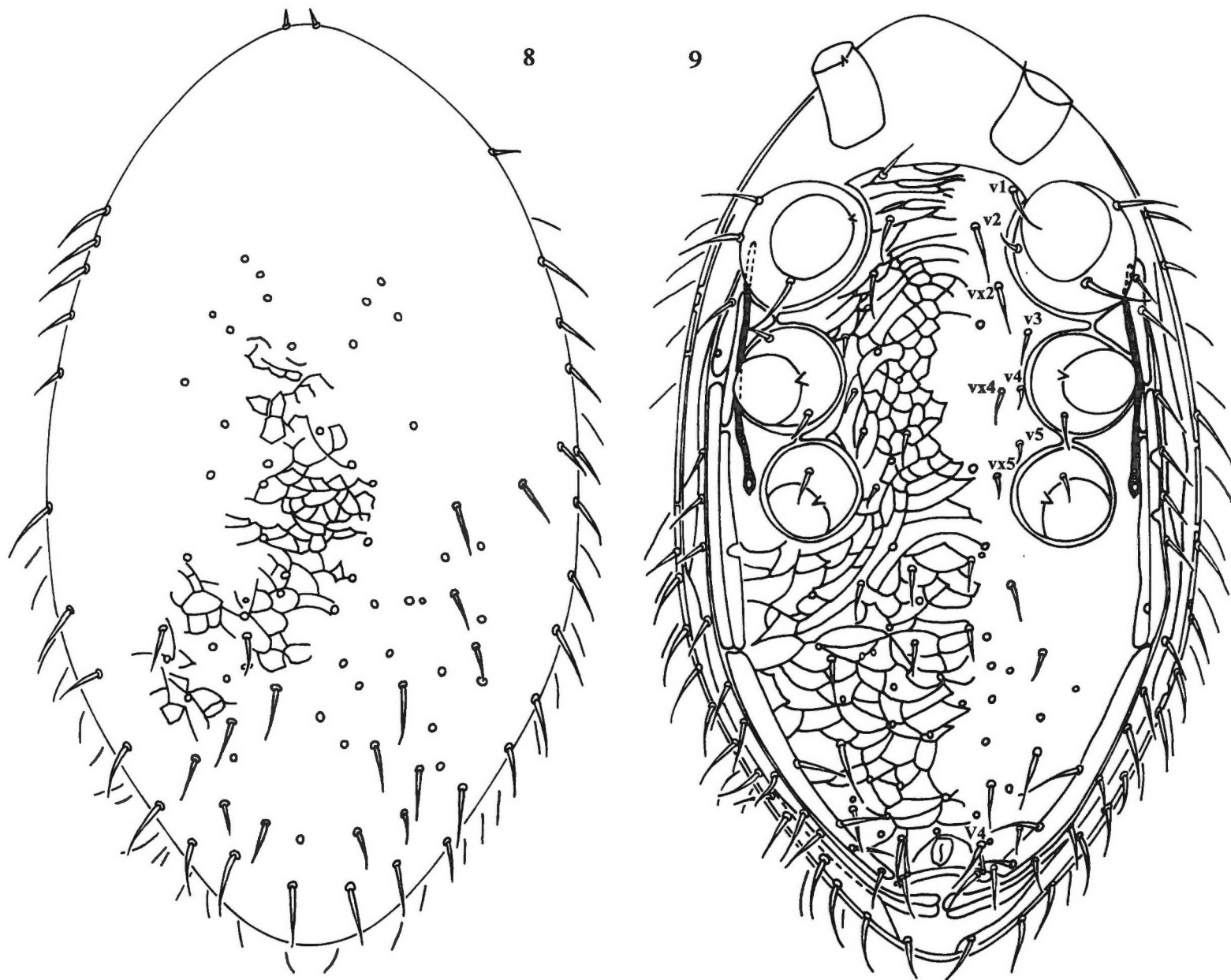
FIGS 1-2. — *Schizocyrtillus josefinae* n.sp., female. 1. — dorsal view. 2. — ventral view.



FIGS. 3-4. — *Schizocyrtillus josefinae* n.sp., female. 3. — gnathosoma (venter). 4. — chelicera.



FIGS. 5-6. — *Schizocyrtillus josefinae* n.sp., female. 5. — tectum. 6. — tarsus III.  
FIG. 7. — male, tectum.



FIGS 8-9. — *Schizocyrtillus josefinae* n.sp., male. 8. — dorsal view. 9. — ventral view.

shield visibly overlaps ventral side. Central and posterior part of body bearing reticular ornamentation.

Idiosomal venter (FIG. 2) posterior to sternal shield, which is wider than long. Its posterior part extends behind coxae II and borders two metasternal shields. Sternal shield bearing three pairs of simple sternal setae, of which v1 are longest, located submarginally on anterior angles of shield. The two remaining pairs, v2 and vx2, located between coxae II. Sternal shield bearing distinct reticular ornamentation. Two narrow metasternal shields characteristic of the genus *Schizocyrtillus* situated between coxae II and III, their external margins extending almost to coxae II and bearing shallow incision; posterior margins sinuous. Both metasternal shields bear single setae v3. Postanal shield bears one pair of setae. Laterally situated, complex, multi-part ventrimarginal shields extending from coxae II to postanal shield. Peritreme extend from the middle of coxae II to the middle of coxae IV and terminate in stigmata.

Gnathosoma. Hypostome with corniculi horn-like. All hypostomatic setae long and simple (FIG. 3). Anterior hypostomal seta (C1) 35 long, hypostomatic setae C2, C3 60. Pedipalp coxal seta C4 short. Fixed digit with single big tooth situated anteriorly and five smaller teeth situated posteriorly, movable digit with four teeth of same size situated anteriorly and five smaller posteriorly (FIG. 4).

Tectum pointed, triangular, bearing several teeth laterally (FIG. 5).

MALE : Idiosomal dorsum (FIG. 8) like in female well sclerotized, length 600, width 350. Shape, setal length and ornamentation as in female.

Idiosomatic venter (FIG. 9) with holovertral shield bearing simple setae. Setae v1, v2, vx2 markedly longer than other setae situated between coxae II and coxae III. Pori-anal setae V4 shorter than those of female, their length equal to v1. Holovertral shield with reticular ornamentation; ventrimarginal shields, postanal shield, peritremata like those of female. Unlike female, ventrimarginal shields in the proximity of anal orifice bearing four and not three setae.

Gnathosoma. Hypostome similar to that of female. Tectum pointed and more elongated than that

of female and with smaller number of teeth (FIG. 7). Chelicerae half the length of that of female, fixed digit and movable digit curved.

#### REMARKS

The shape of *Schizocyrtillus josefinae* is similar to that of *Schizocyrtillus lathrius* Kinn, 1970 - oval, broadly rounded posteriorly, more pointed anteriorly.

As in *S. lathrius*, the ventral, anal, parapodal, peritremal, and metapodal shields are fused. However, unlike in *S. lathrius*, the ventral shields bear distinct reticular ornamentation. Moreover, the species also differ in terms of the setae length. In *S. josefinae*, the setae located between the coxae III and IV that is v4, x1, x2, x3, x4, v5 are at least 1/3 shorter than the setae located posteriorly. Only the longest pori-anal V4 setae are three times the length of v3. Another difference is associated with the shape and size of the postanal shield. In *S. lathrius*, the length-width ratio of this shield is 2:3, while in *S. josefinae* 1:4.

Unlike in *S. lathrius*, in *S. josefinae* each ventrimarginal shield in the proximity of the anal orifice bears 3 simple setae - one pair posterior to anal orifice, and two anterior.

Similar proportions in length of hypostomatic setae as in *S. josefinae* have been found in *S. lathrius*. Chelicerae of *S. josefinae* are markedly different from those in *S. lathrius*. Tarsus III of *S. josefinae* (FIG. 6) with setae markedly longer than in *S. lathrius*.

#### ETYMOLOGY

The species is dedicated to my daughter JOSEFINA VICTORIA GWIAZDOWICZ.

#### TYPE MATERIAL

Holotype: 1 female, in worm dust under the bark of dry pine, East Poland, Bialowieza National Park, 8.09.1992, leg. D.J. GWIAZDOWICZ.

Paratypes: 1 female and 1 male, in anthill of *Formica (F.) polyctena* Foerster, East Poland, Bialowieza National Park, 8.09.1992, leg. D.J. GWIAZDOWICZ.

Holotype and paratypes are deposited in the author's collection.

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