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A C T A Z O O L O G I C A
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New Species of the Genus *Leptogamasus* TRÄGÅRDH, 1936, sensu ATHIAS-HENRIOT,
1971 (*Acarina, Parasitidae*)

[Pp. 271—300, 28 text-figs.]

Nowe gatunki z rodzaju *Leptogamasus* TRÄGÅRDH, 1936, sensu ATHIAS-HENRIOT, 1971
(*Acarina, Parasitidae*)

Новые виды рода *Leptogamasus* TRÄGÅRDH, 1936, sensu ATHIAS-HENRIOT, 1971
(*Acarina, Parasitidae*)

Abstract. Descriptions of 5 new species of the genus *Leptogamasus* TRÄG.—*L. dolosus*,
L. decoratus, *L. belligerens*, *L. facetus* and *L. succineus*—are given. This species belong to the
group *Parvulus* sensu MICHERDZIŃSKI, 1969. The types are in the authors possession.

Leptogamasus dolosus n. sp.

Holotype: female (Parasit. No. 593B). Paratypes: other specimens.

Character common to male and female: the pattern of the upper angle of the
sternum above aperture for coxa II (Fig. 2A, B) and the tooth situated antero-
dorsally on trochanter IV.

Female: diagnosis. Endogynium as in Fig. 2B, poorly sclerotized and
passing indistinctly into the oviduct.

Description. Idiosoma measurements— 445×255 µm (female paratypes $445 - 455 \times 255 - 270$ µm). Ventral shield (Fig. 1) with typical arrangement of setae.
The paragynium (Fig. 2C) is thickened only in the place of the attachment
of the endogynium, which (Fig. 2B) is very fine, poorly sclerotized. Epigynium
(Fig. 2A) shows a V-shaped thickening. Gnathosoma as in Fig. 3A. Q = 11.
Setae of gnathosoma smooth. Laminae small, situated at base of laciniae.

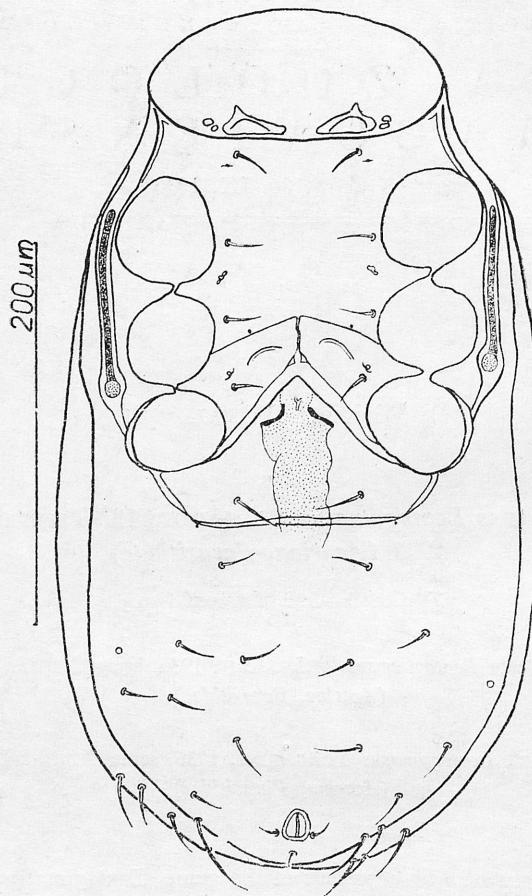


Fig. 1. *Leptogamius dolosus* n. sp., Female (Holotype). Ventral side of idiosoma

Seta V_1 on trochanter palpi serrated, V_2 smooth. Tectum with pattern as in Fig. 3B. Chelicera (Fig. 3C): digitus fixus with 5 teeth. Pilus dentilis poorly seen by the second tooth counting from the apical end. Legs: trochanter IV has a small tubercle on the posteroventral side and a pronounced tooth projecting anterodorsally on the opposite side (Fig. 3E).

Male: diagnosis. Pattern in upper angle of sternum Fig. 2E, leg II Fig. 5D.

Description of male paratype (Parasit. No. 453A). Idiosoma measurements $425 \times 245 \mu\text{m}$. Ventral side shown in Fig. 4. Characteristic pattern (Fig. 2E), similar to that in female, present in upper angle of sternum (above aperture for coxa II). Gnathosoma (Fig. 5B): laciniae dentate up to end, laminae on laciniae long and narrow, corniculi fairly slender. Setae of gnathosoma smooth. $Q = 11$. Seta V_2 on trochanter palpi smooth, V_1 serrated one-sidedly. Tectum with pattern as in Fig. 5C. Chelicera (Fig. 5A): digitus fixus with several small denticles. Pilus dentilis well seen. Trochanter IV with a tooth on anterodorsal side (Fig. 3D).

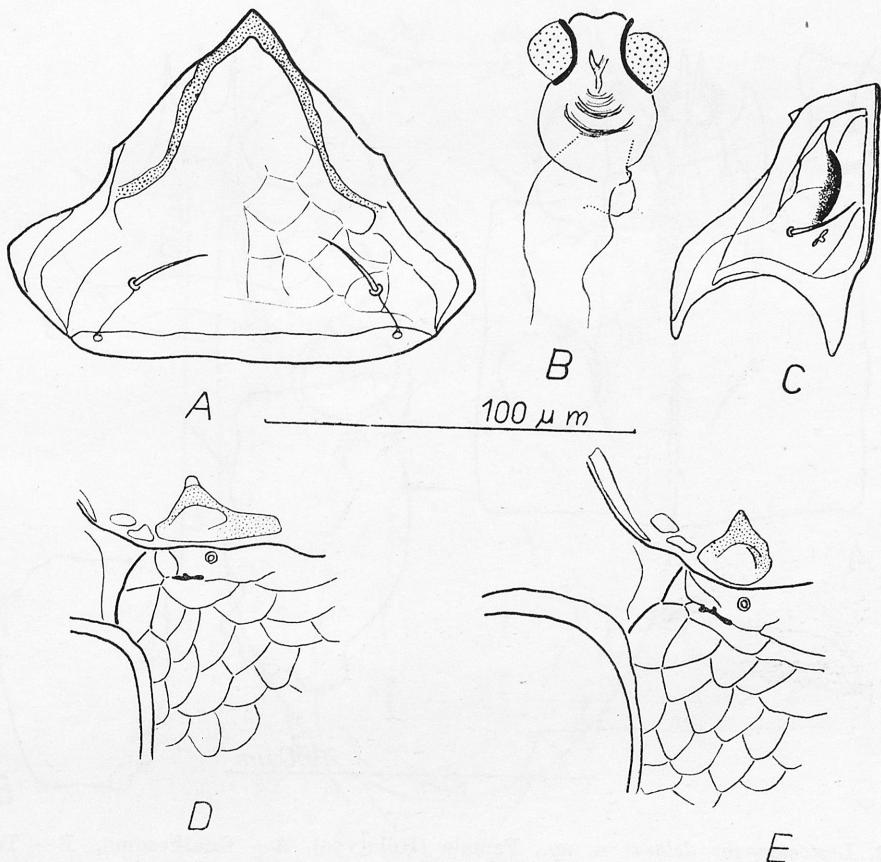


Fig. 2. *Leptogamasus dolosus* n. sp., Female (Holotype). A — Epigynum, B — Endogynium, C — Paragynium, D, E — Frontal angle of sternum. (A, B, C, D — Femlae, E — Male),

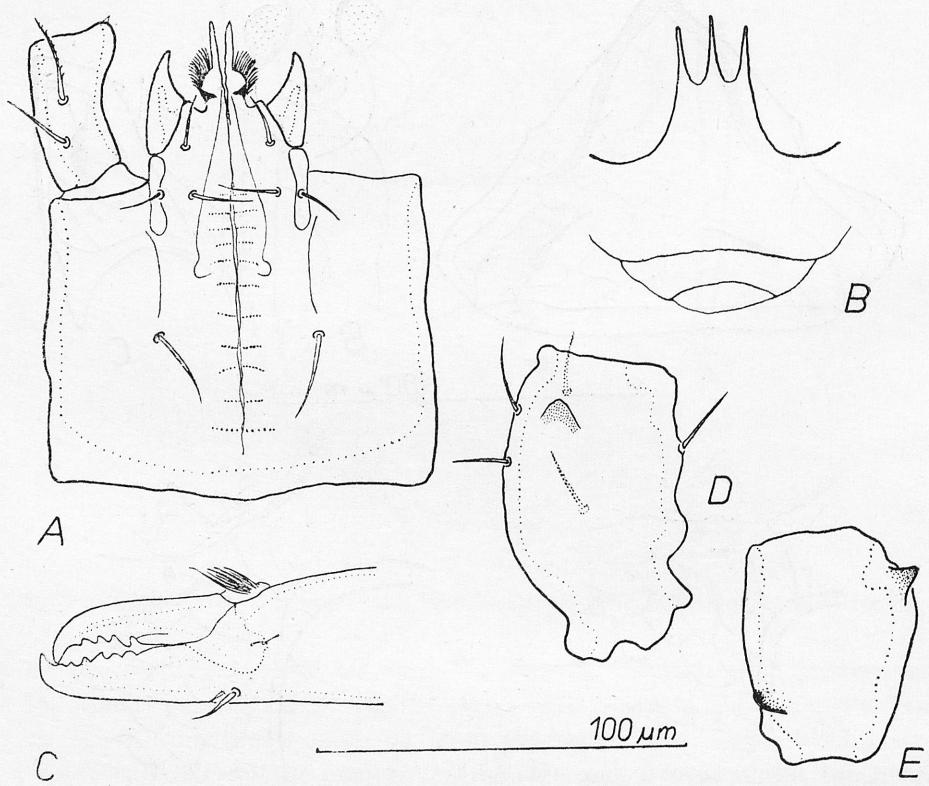


Fig. 3. *Leptogamasus dolosus* n. sp., Female (Holotype). A — Gnathosoma, B — Tectum, C — Chelicera, D — *Tr* IV (view from the dorsal side), E — *Tr* IV (view from the other side)

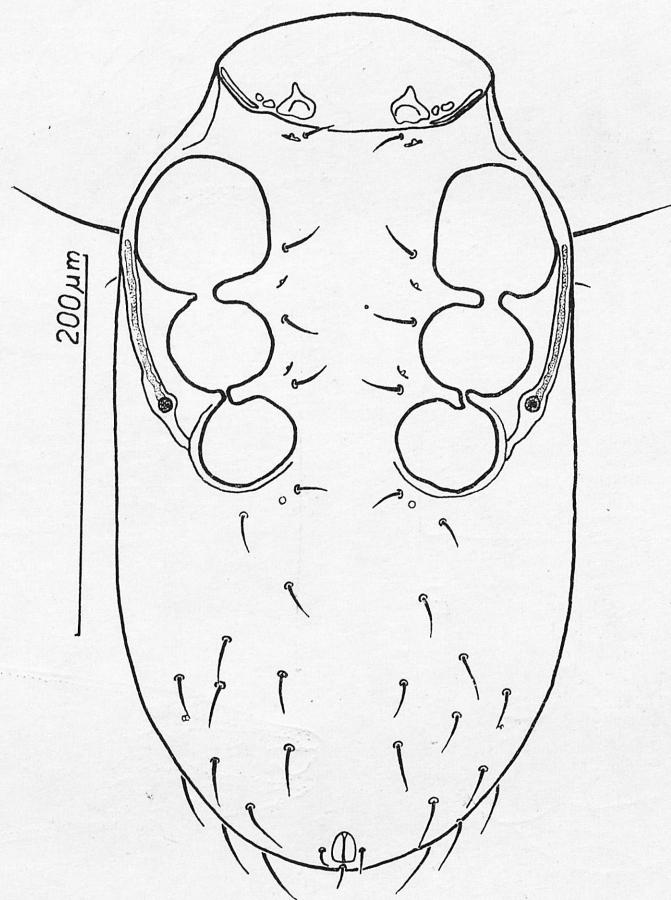


Fig. 4. *Leptogamasus dolosus* n. sp., Male (Paratype). Ventral side of idiosoma

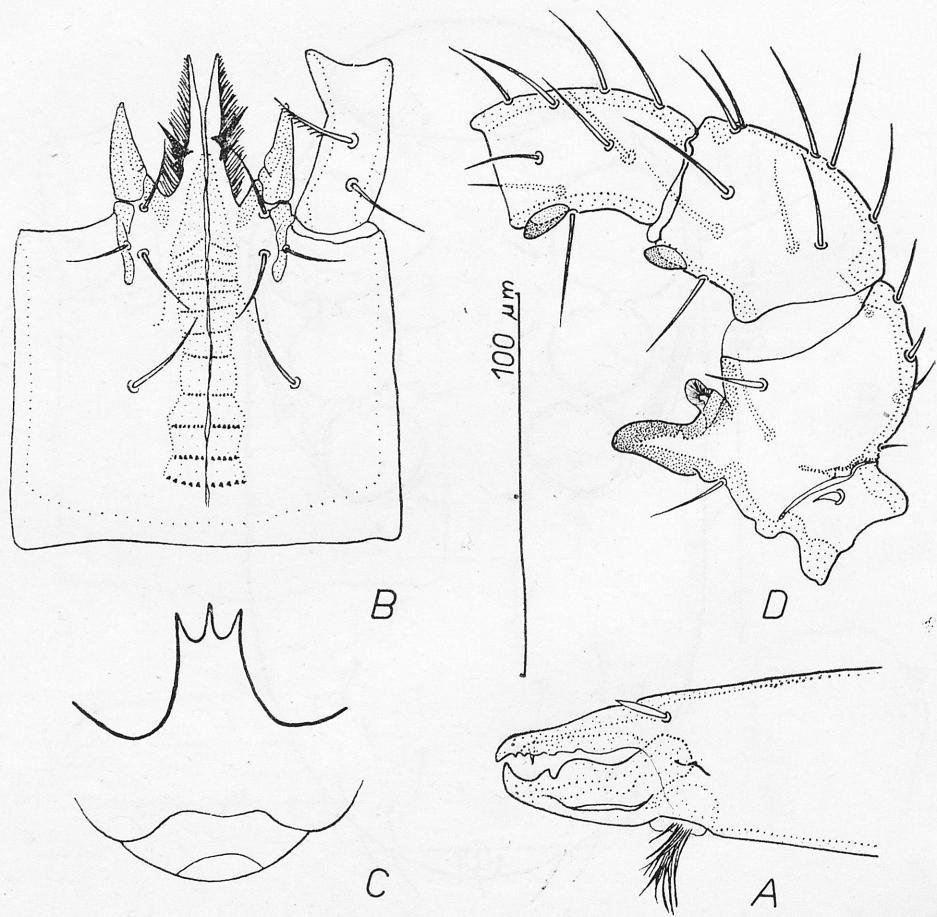


Fig. 5. *Leptogamasus dolosus* n. sp., Male (Paratype). A — Chelicera, B — Gnathosoma, C — Tectum, D — Leg II (Fe, Ge, Ti)

Type localities: the specimens of this species were gathered at the following localities: 2 ♀♀ (Parasit. Nos. 593 B, 600) in the litter of the beech forest on Cergowa Mt. near Dukla (south-eastern Poland) on 12 Oct. 1969. 1 ♀ (Parasit. No. 418) and 1 ♂ (Parasit. No. 453 A) in the litter of a deciduous forest in Cisna region (Bieszczady, south-eastern Poland) on 17 May 1969, and 2 ♀♀ (Parasit. No. 614) in the litter of a deciduous forest (oak prevalent) at Myślenice near Cracow (southern Poland) on 31 March 1970.

Leptogamasus decoratus n. sp.

Holotype: female (Parasit. No. 585 B). Paratypes: other specimens.

Character common to male and female: the pattern of the upper angle of the sternum above the aperture for coxa II (Fig. 8C, D).

Female: diagnosis. Endogynium with two dentate plates (Fig. 7C).

Description. Idiosoma measurements — 570×325 µm (female paratypes $600-620 \times 290-345$ µm). Ventral side illustrated in Fig. 6. Paragynia (Fig. 7B) with slightly thickened edges. Epigynium triangular, with thickenings distributed as in Fig. 7A. Endogynium (Fig. 7C) sharply demarcated at the rear. Two chitinized laminae, dentate at the end, protrude forward from the posterior edge. „Les spherules” (ATHIAS, 1967b) directed to the inside of the spermatheca, are well seen at the sides. Gnathosoma (Fig. 8A): laminae small, set at base of lacinia. Thickenings of hypostome rather narrow. $Q = 11$. Setae of gnathosoma smooth. Seta V_2 on trochanter palpi smooth, V_1 serrated one-sidedly. Tectum with distinct pattern (Fig. 7D). Chelicera (Fig. 8B): the digitus fixus bears two teeth between the apex and the pilus dentilis and two other ones and three rounded laminae farther towards the base.

Male: diagnosis. Apophyses on leg II as in Fig. 10A.

Description of male paratype (Parasit. No. 585 A). Idiosoma measurements 550×320 µm (other male paratypes $530-560 \times 250-320$ µm). Gnathosoma (Fig. 9A): laciniae serrate up to end, laminae long and narrow. Corniculi with a bulge. Hypostome with 11 thickenings, first 7 of them very poorly seen. Setae $G_{1,2,3}$ smooth, G_4 serrated. Seta V_1 on trochanter palpi serrated, V_2 smooth. Tectum with pretty broad teeth (Fig. 10B). Chelicera (Fig. 9B): digitus fixus with 11 fine denticles, regularly distributed. Distribution and shape of apophyses on leg II shown in Fig. 10A.

Type localities: the specimens of the species *L. decoratus* n. sp. were collected in the litter of the beech forest on Cergowa Mt. near Dukla (south-eastern Poland) on 12 Oct. 1969 (32 ♀♀ — Parasit. Nos. 585 B, 586—589 and 26 ♂♂ — Parasit. Nos. 585 A, 591—593, 599) and in the litter of a damp mixed forest at Myślenice near Cracow (southern Poland) on 10 Nov. 1969 (1 ♀ and 1 ♂ — Parasit. No. 574).

Systematics: the endogynium of female *L. decoratus* resembles that of *Pergamasus valesianus* SCHWEIZER in outline. However, the description given by SCHWEIZER (1961), in which he writes that the endogynium has two roundish structures and a spiral positioned horizontally in the middle part, contradicts the synonymy of these species.

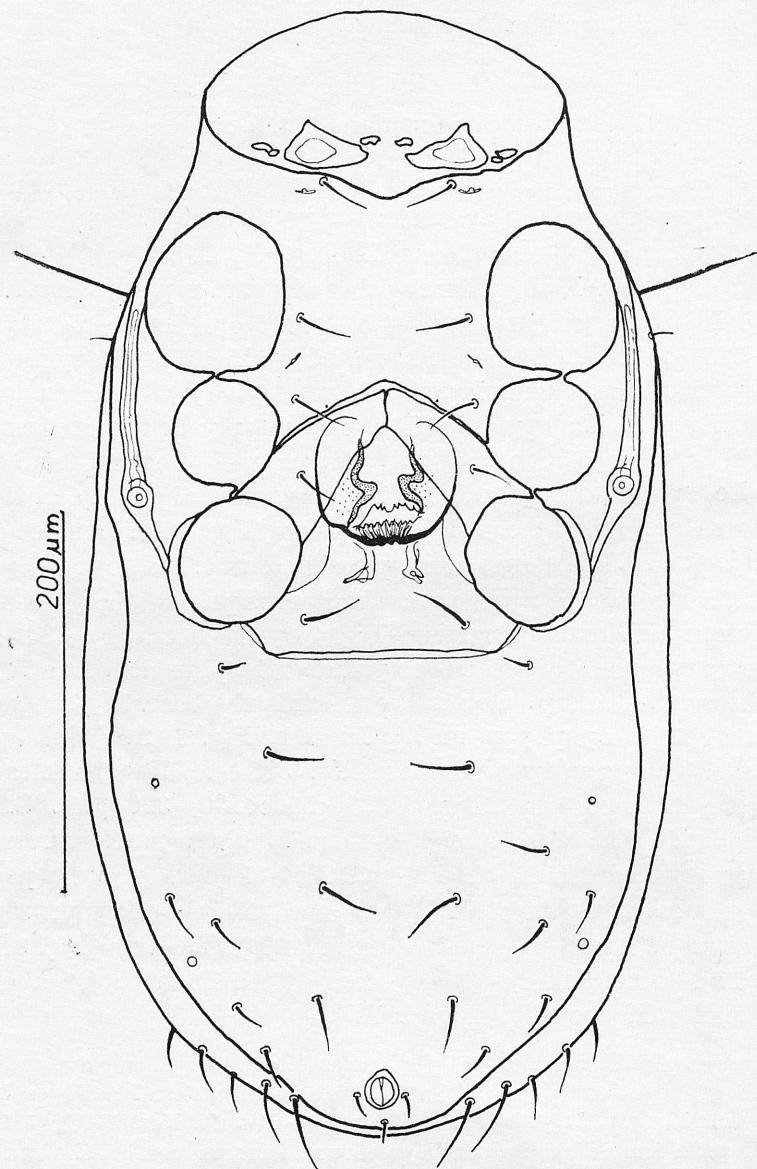


Fig. 6. *Leptogamasus decoratus* n. sp., Female (Holotype). Ventral side of idiosoma

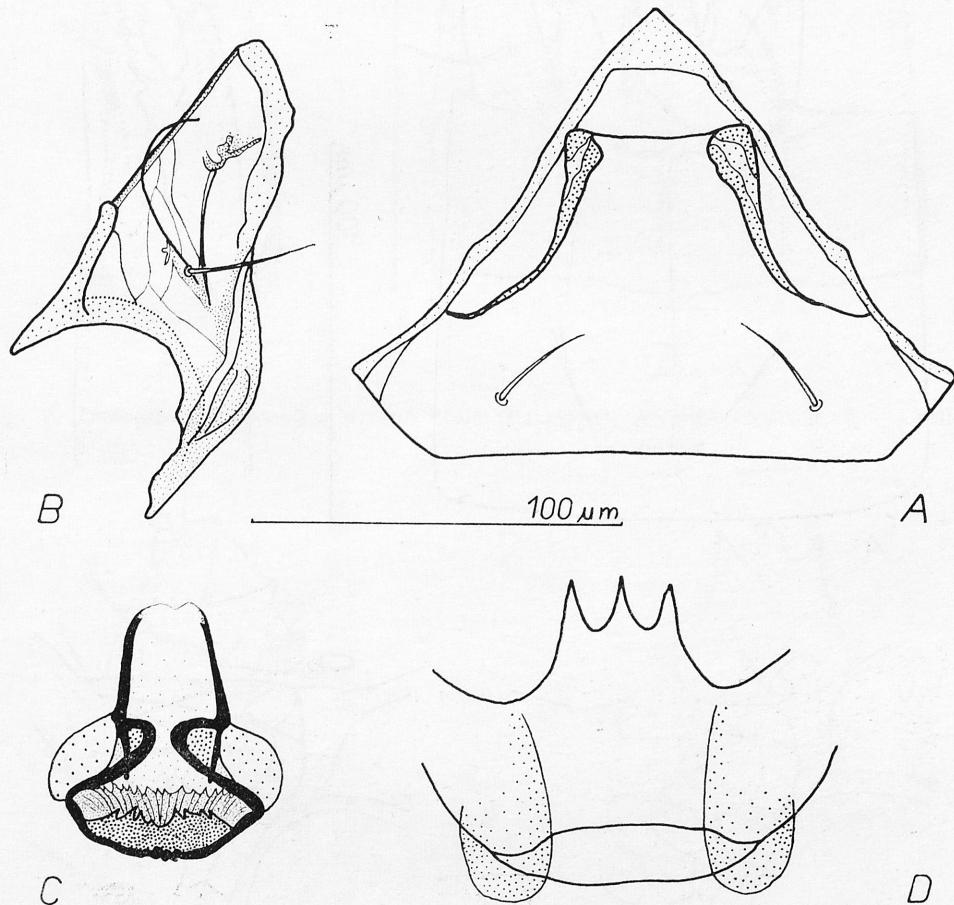


Fig. 7. *Leptogamasus decoratus* n. sp., Female (Holotype). A — Epigynum, B — Paragynium, C — Endogynium, D — Tectum

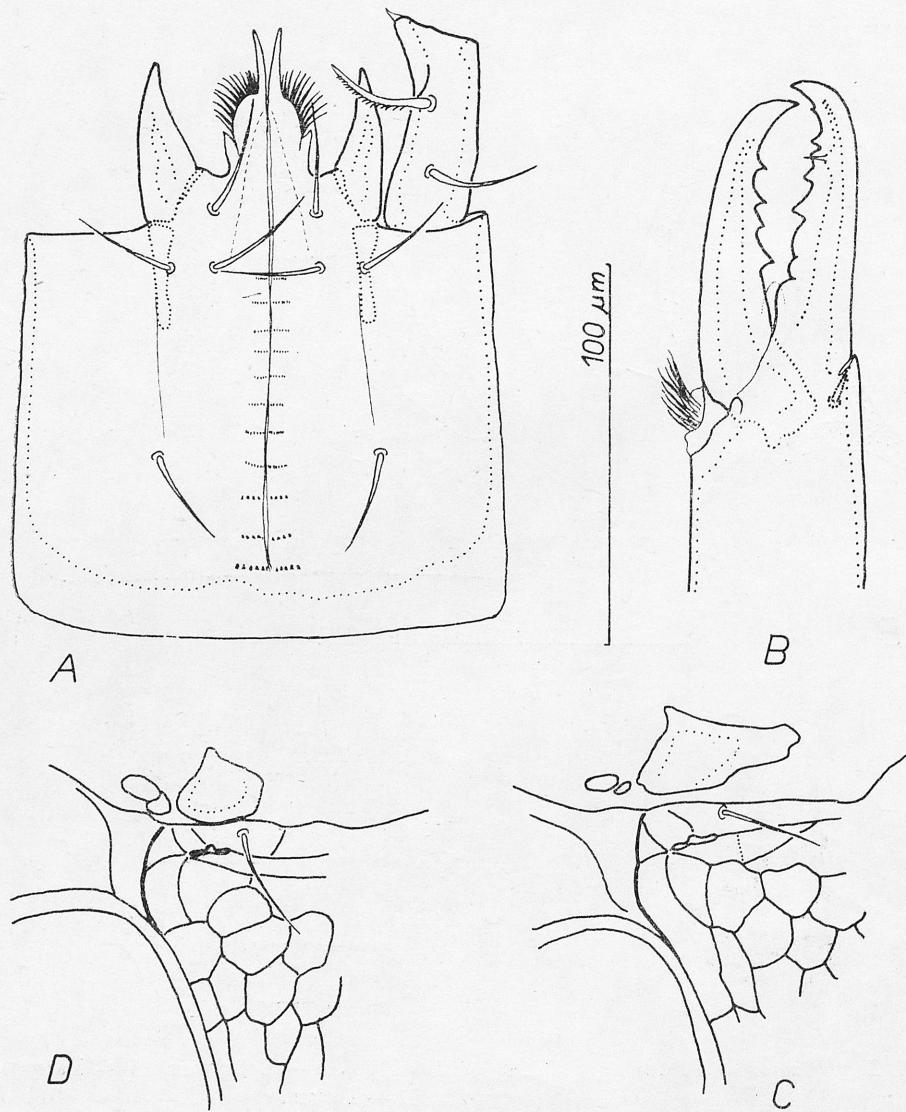


Fig. 8. *Leptogamasus decoratus* n. sp., A — Gnathosoma, B — Chelicera, C, D — Frontal angle of sternum; A, B, C — Female (Holotype), D — Male (Paratype)

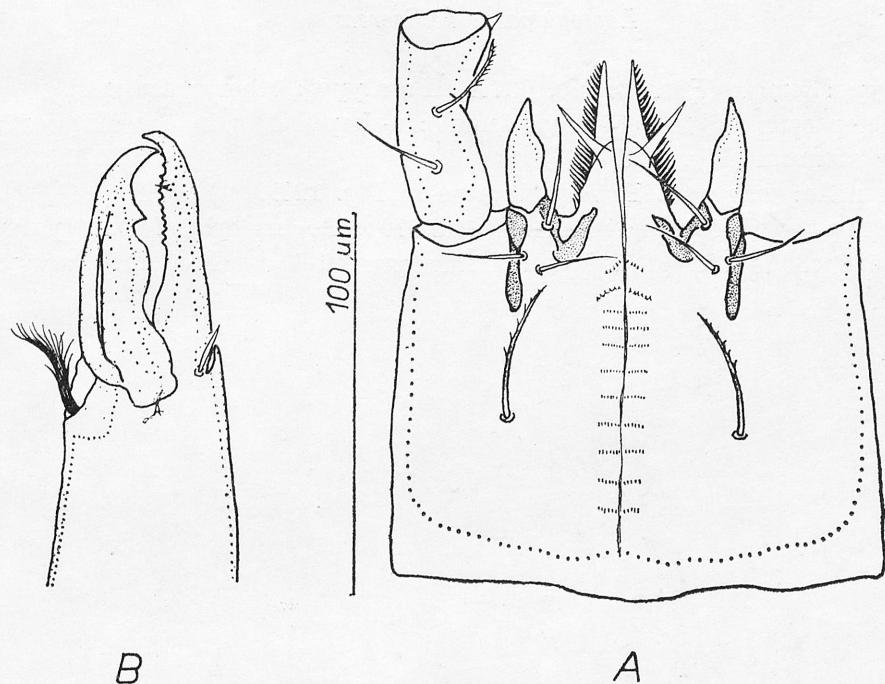


Fig. 9. *Leptogamasus decoratus* n. sp., Male (Paratype). A — Gnathosoma, B — Chelicera

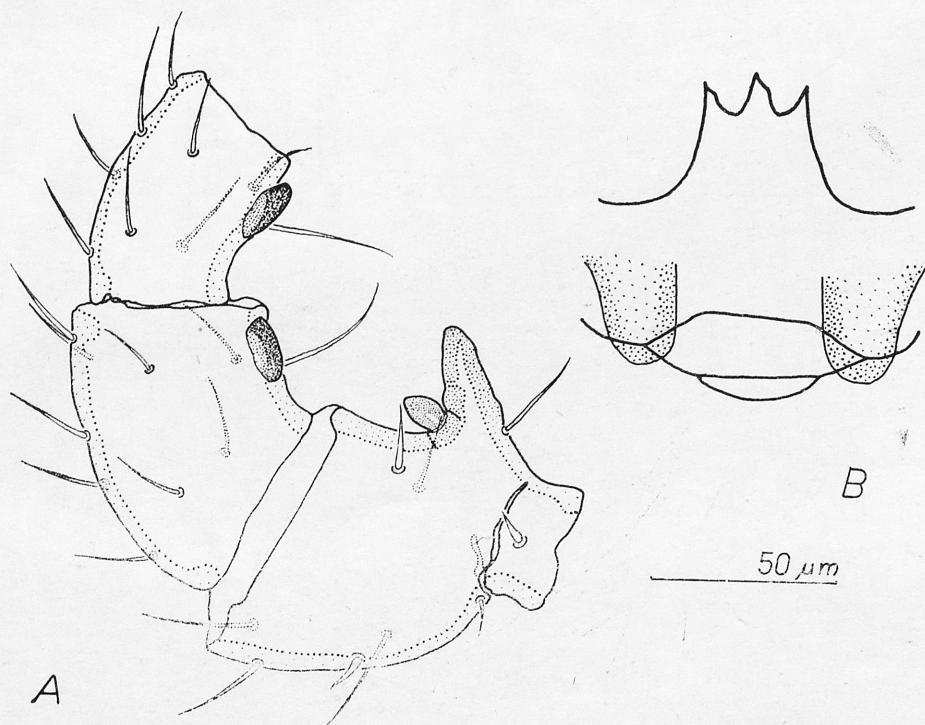


Fig. 10. *Leptogamasus decoratus* n. sp., Male (Paratype). A — Leg II (Fe, Ge, Ti), B — Tectum

Leptogamasus belligerens n. sp.

Holotype: female (Parasit. No. 637 A). Paratypes: other specimens.

Character common to male and female: s-shaped line in the anterior angle of the sternum (Fig. 13 C, D).

Female: diagnosis. Endogynium as in Fig. 12 D.

Description. Idiosoma measurements $570 \times 330 \mu\text{m}$ (other female paratypes $565-580 \times 300-380 \mu\text{m}$). Ventral side presented in Fig. 11. Paragynium

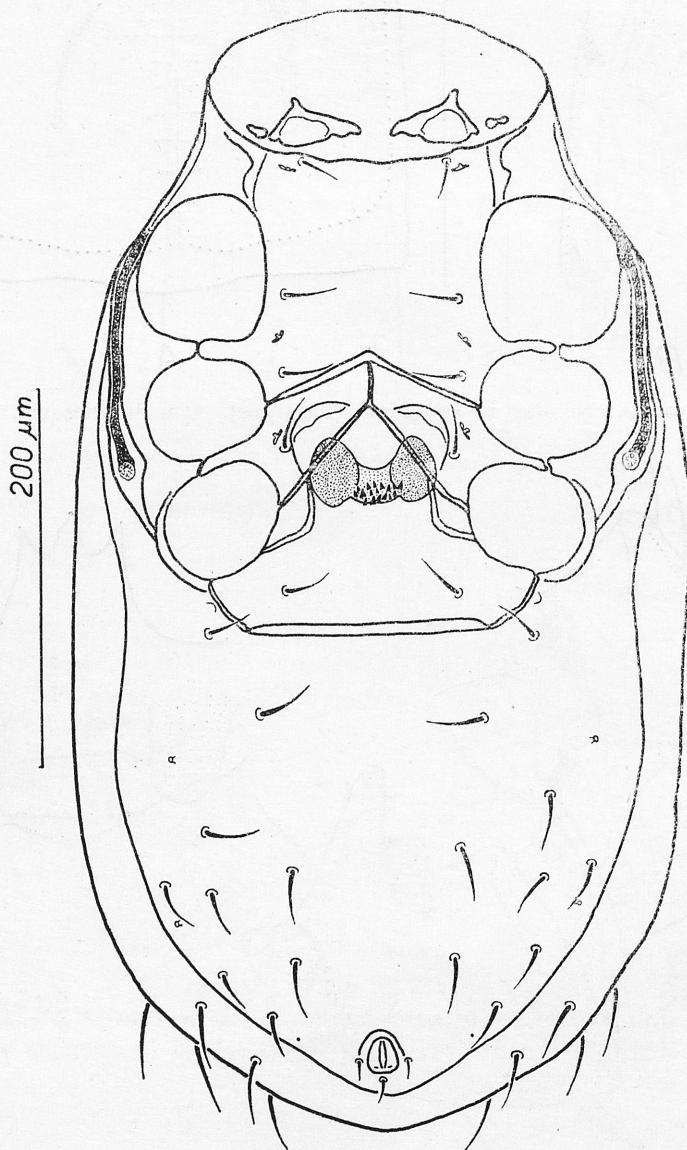


Fig. 11. *Leptogamasus belligerens* n. sp., Female (Holotype). Ventral side of idiosoma.

(Fig. 12 B) with medial and posterior edges thickened. Epigynium with a slight thickening as in Fig. 12 A. Endogynium (Fig. 12 D) with 1 large „les spherules” and a row of teeth between them. These teeth are formed on the edge of a lamina „le stipule” oriented more or less perpendicularly to the ventral shield. Fig. 12 C shows an endogynium removed from the body and slightly squeezed. Ghathosoma (Fig. 13 A): laminae small, situated at bases of laciniae. Hypostome with 11 thickenings. Setae of gnathosoma smooth. Seta V_1 on trochanter palpi serrated, V_2 smooth. Chelicera (Fig. 13 B): digitus fixus with several irregular teeth.

Male: diagnosis. Leg II as in Fig. 15 D.

Description of male paratype (Parasit. No. 637 C). Idiosoma measurements $530 \times 315 \mu\text{m}$ (other male paratypes $530-555 \times 315-350 \mu\text{m}$). Ventral side of idiosoma shown in Fig. 14. Ghathosoma (Fig. 15 A): laciniae dentate up to end, laminae long. Corniculi rather slender. Thickening of hypostome poorly visible. Q = 10. Setae of gnathosoma smooth. Seta V_1 on trochanter palpi serrated and V_2 smooth. Tectum identical with that of female. Chelicera (Fig. 15 C): digitus fixus with many denticles. Leg II — the distribution and

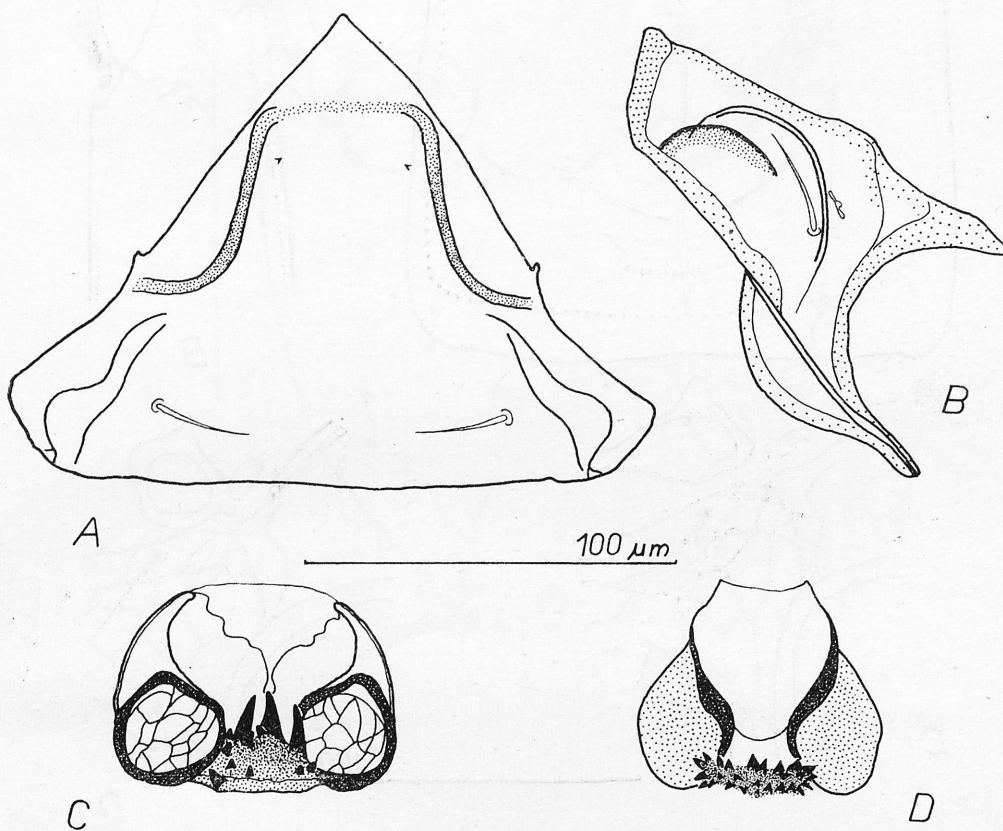


Fig. 12. *Leptogamasus belligerens* n. sp., Female (Holotype). A — Epigynium, B — Paragynium, C — Endogynium (dissected out and slightly pressed), D — Endogynium (in situ)

shape of the apophyses are presented in Fig. 15D. Seta pv_1 on $Ge\ II$ with one tooth.

Type localities: the specimens of this species were found in the litter of a hornbeam forest at Grabowiec near Busko (Nida Basin, eastern Poland) on 14 May 1970 (5 ♀♀ — Parasit Nos. 632, 637 A, B and 4 ♂♂ — Parasit. No. 637 C, D).

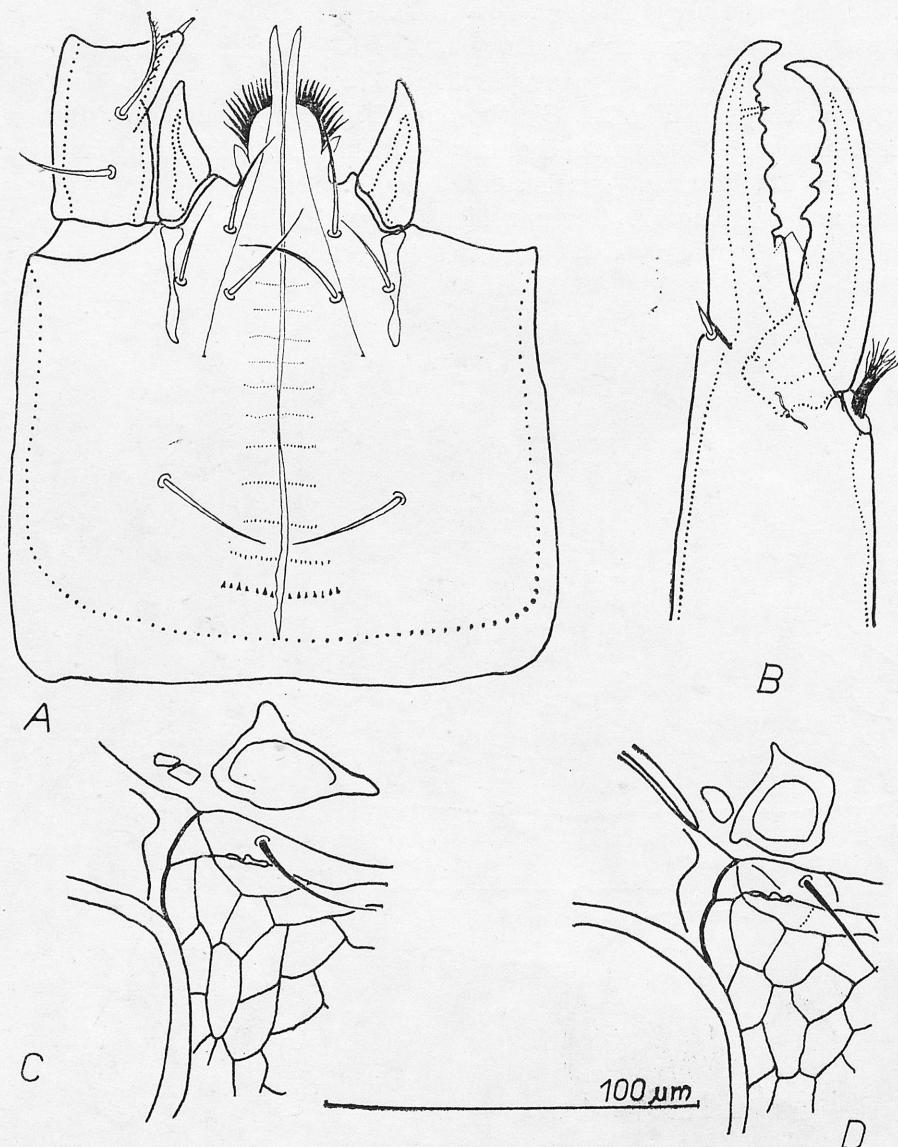


Fig. 13. *Leptogamasus belligerens* n. sp., A — Gnathosoma, B — Chelicera, C, D — Frontal angle of sternum; A, B, C — Female (Holotype), D — Male (Paratype)

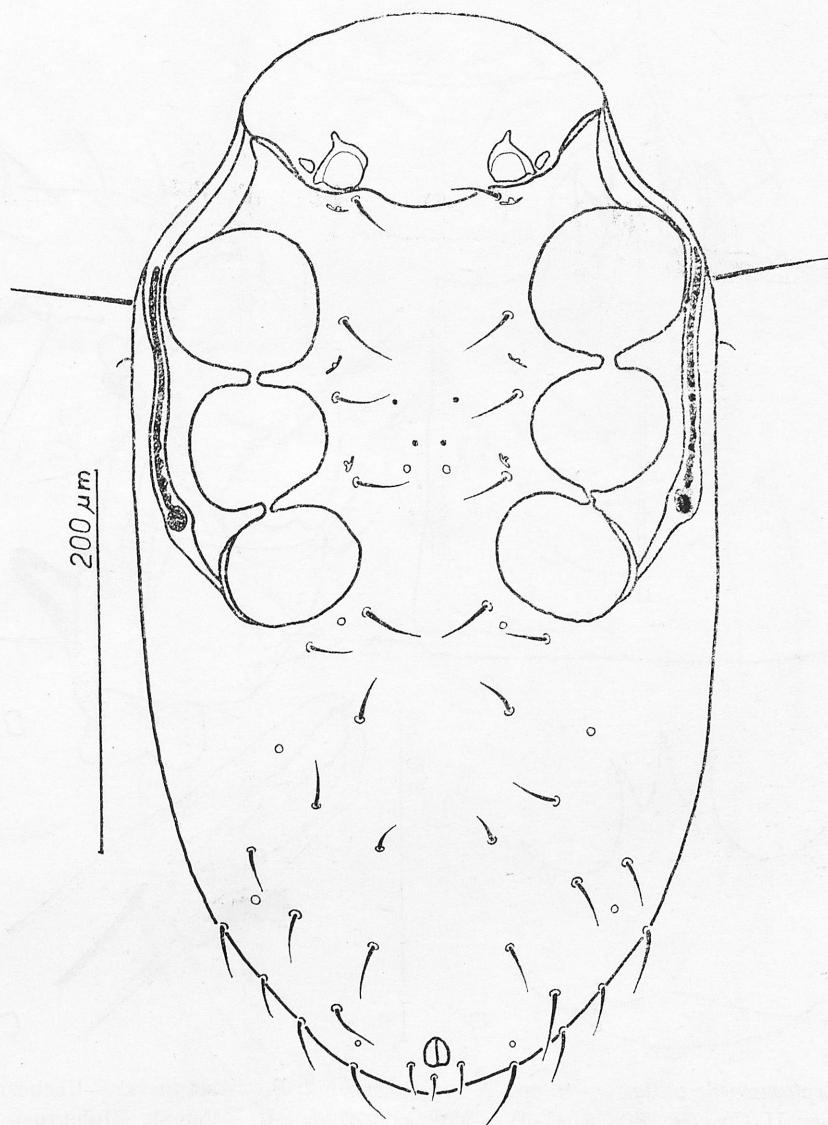


Fig. 14. *Leptogamasus belligerens* n. sp., Male (Paratype). Ventral side of idiosoma

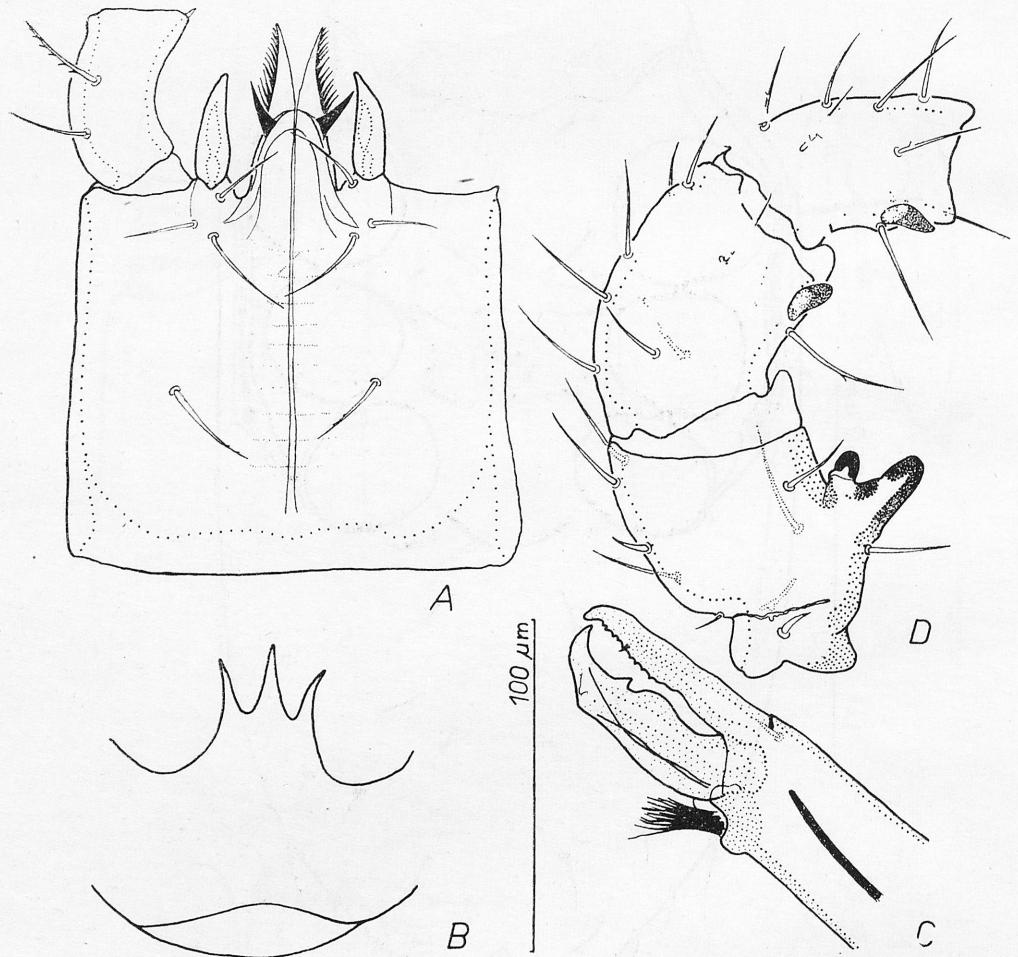


Fig. 15. *Leptogamasus belligerens* n. sp., A — Gnathosoma, B — Tectum, C — Chelicera, D — Leg II (*Fe*, *Ge*, *Ti*); A, C, D — Male (Paratype), B — Female (Holotype)

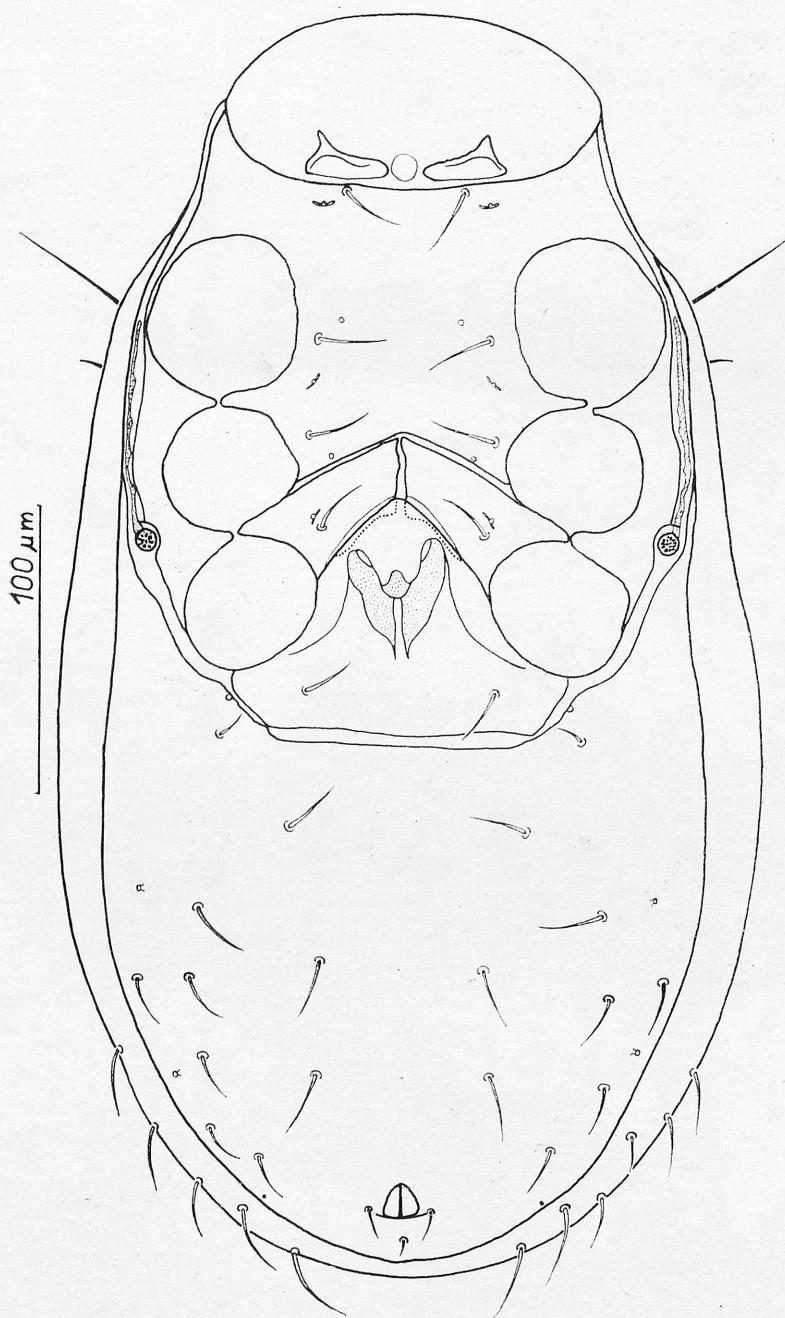


Fig. 16. *Leptogamasus facetus* n. sp., Female (Holotype). Ventral side of idiosoma

Leptogamasus facetus n. sp.

Holotype: female (Parasit. No. 654A). Paratypes: other specimens.

Character common to male and female: some resemblance of the pattern in the anterior angle of the sternum, above the aperture for coxa II (Fig. 18A, B)

Female: diagnosis. Endogynium as in Fig. 17E.

Description. Idiosoma measurements— $485 \times 275 \mu\text{m}$ (other female paratypes

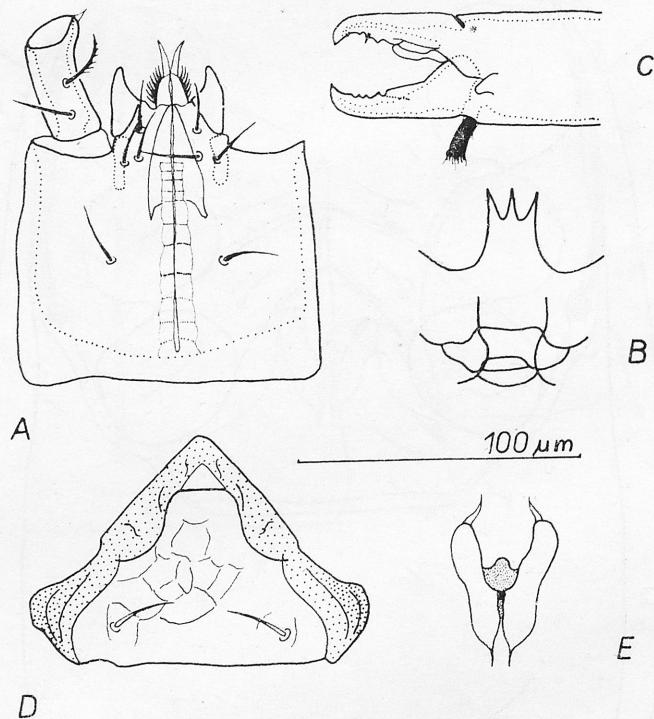


Fig. 17. *Leptogamasus facetus* n. sp., Female (Holotype). A — Ghathosoma, B — Tectum, C — Chelicera, D — Epigynium, E — Endogynium

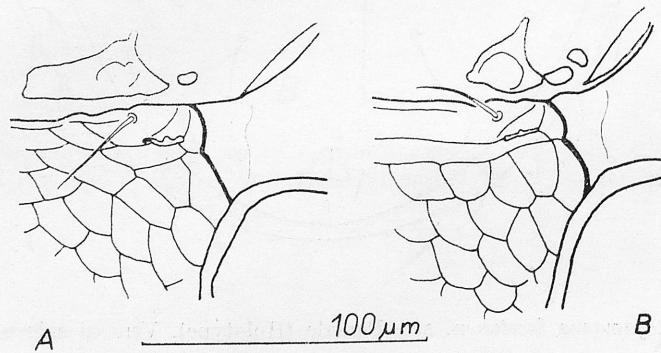


Fig. 18. *Leptogamasus facetus* n. sp., Frontal angle of sternum. A — Female (Holotype), B — Male (Paratype)

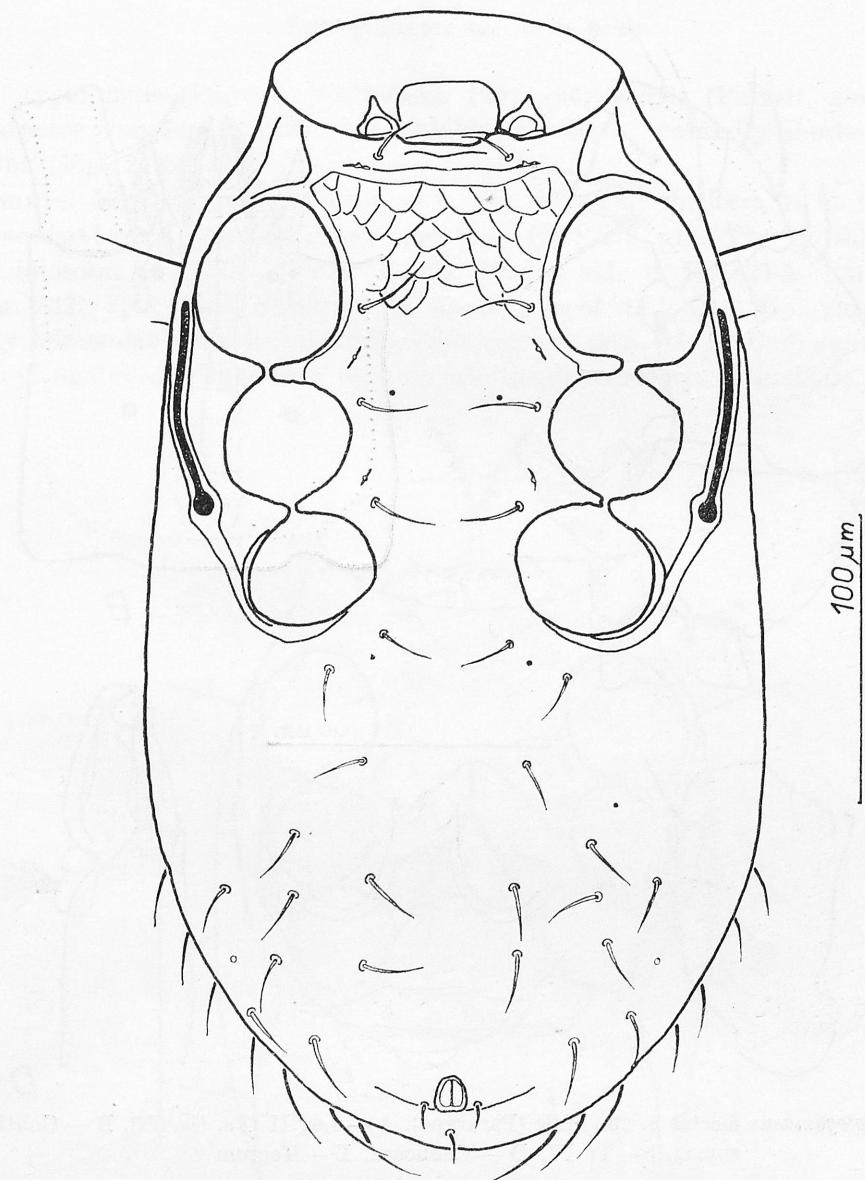


Fig. 19. *Leptogamasus facetus* n. sp., Male (Paratype). Ventral side of idiosoma

480—505—270—290 μm). Non distinctive characters of paragynium. Epigynium (Fig. 17D) with anterior edge thickened. Endogynium characteristic, composed of two symmetrical parts corresponding to „les spherules” (probably) (Fig. 17E). Gnathosoma (Fig. 17A): laminae on laciniae small. Hypostome with 11 thickenings. Setae of gnathosoma smooth. Seta V_1 on trochanter palpi serrated, V_2 smooth. Tectum (Fig. 17B). Chelicera (Fig. 17C): digitus fixus with 2 teeth in front of and 1 behind pilus dentilis.

Male: diagnosis. Shape of apophyses on leg II as in Fig. 20A.

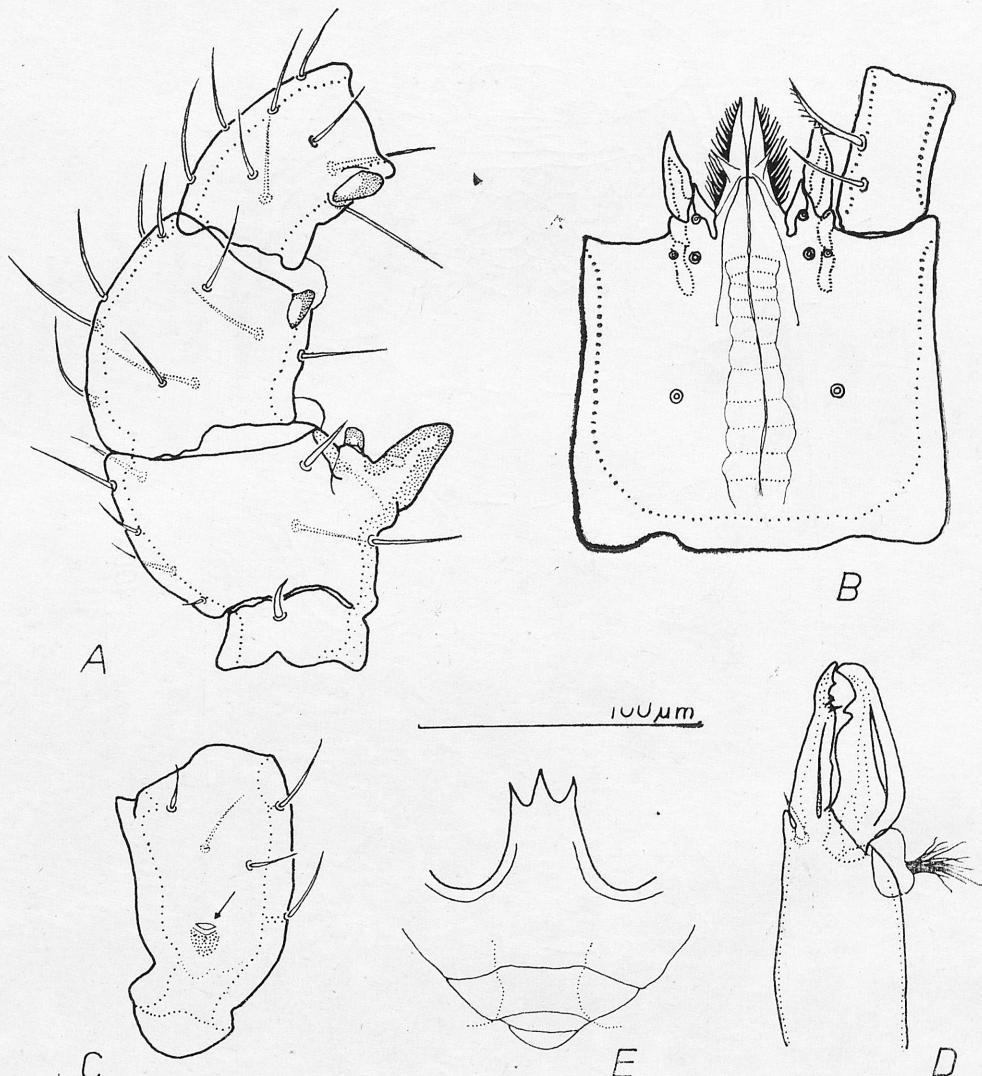


Fig. 20. *Leptogamasus facetus* n. sp., Male (Paratype). A — Leg II (Fe, Ge, Ti), B — Gnathosoma, C — Tr IV, D — Chelicera, E — Tectum

Description of male paratype (Parasit. No. 655 A). Idiosoma measurements $435 \times 255 \mu\text{m}$ (other male paratypes $420—440 \times 230—255 \mu\text{m}$). Ventral side shown in Fig. 19. Gnathosoma (Fig. 20 B): laciniae dentate at end, laminae thin and pointed. Q = 11. Seta V_1 on trochanter palpi serrated, V_2 smooth. Chelicera (Fig. 20 D): digitus fixus with only 2 denticles in front of pilus dentilis. The shape and distribution of the apophyses on leg II, as in Fig. 20 A. Trochanter IV with a tooth and a thickening of cuticle (indicated with an arrow in Fig. 20 C).

Type localities: the specimens of this species were collected in the litter of a dry spruce forest at Rytro near Nowy Sącz (southern Poland) on 23 May 1969 (2 ♀♀ — Parasit. Nos. 448, 449 and 4 ♂♂ Parasit. Nos. 458, 460) and on 11 Oct. 1970 (2 ♀♀ Parasit. Nos. 654 A, 660 and 2 ♂♂ — Parasit. Nos. 655 A, 660).

Leptogamasus succineus n. sp.

Holotype: male (Parasit. No. 593A). Paratype: female (Parasit. No. 593A). Character common to male and female: distinctive, markedly shortened peritrema (Fig. 21B).

Female: diagnosis. Endogynium as in Fig. 23D and chelicera as in Fig. 23C.

Description. Idiosoma measurements — $460 \times 275 \mu\text{m}$. The dorsal side of the idiosoma is shown in Fig. 22, the ventral side in Fig. 21A. Paragynium (Fig. 23B) specifically narrowed in the middle of its length. Epigynium regularly triangular with rounded posterior corners (Fig. 23A). Endogynium with two elongated „les spherules” and no additional structures (Fig. 23D). Gnatho-

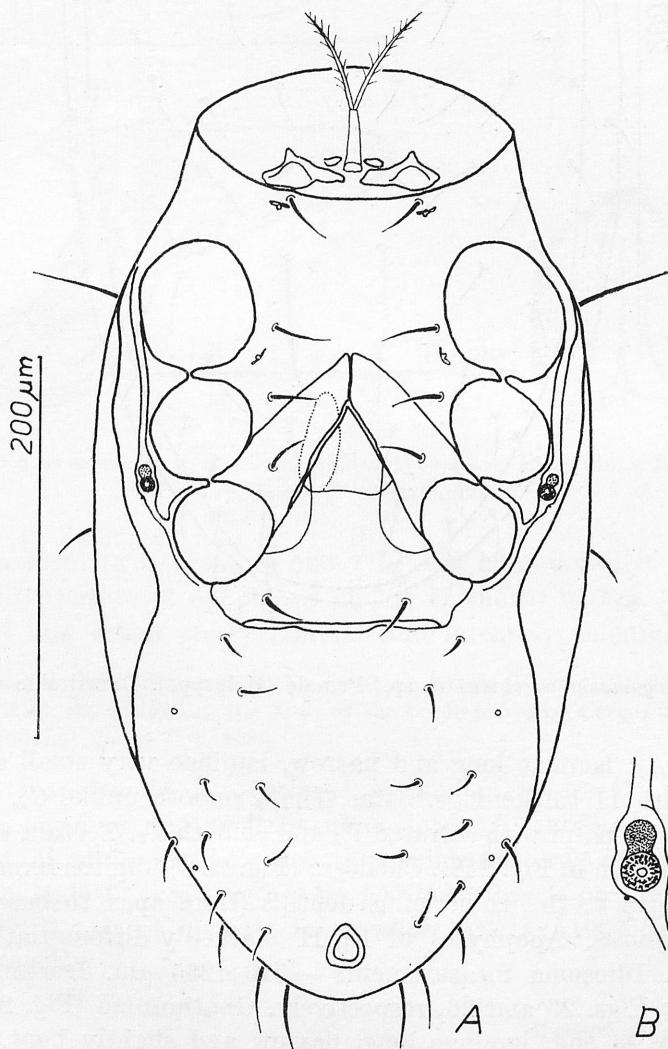


Fig. 21. *Leptogamasus succineus* n. sp., Female (Holotype). A — Ventral side of idiosoma,
B — Stigma and peritrema

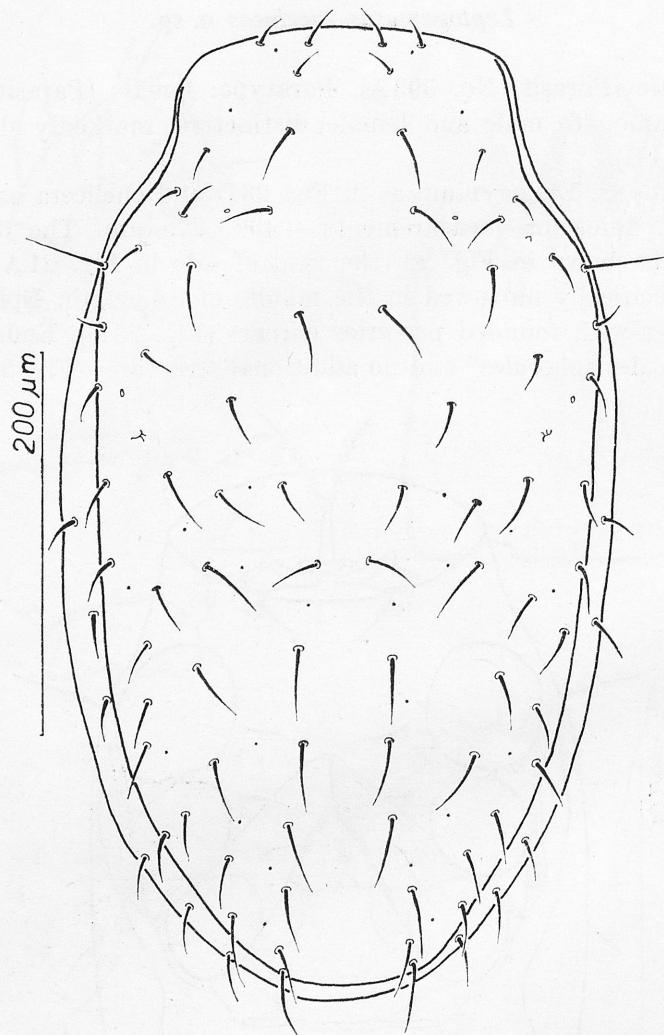


Fig. 22. *Leptogamasus succineus* n. sp., Female (Holotype). Dorsal side of idiosoma

soma (Fig. 24 A): laciniae long and narrow, laminae very small at their base. Hypostome with 11 thickenings. Setae $G_{1, 2, 3}$ smooth unlike G_4 , which is serrated. Trochanter palpi with serrated V_1 and smooth V_2 . Tectum three-toothed. Its pattern is shown in Fig. 24 B. Chelicera (Fig. 23 C): digitus fixus with 2 teeth in front of and 4 teeth behind pilus dentilis (from apex to base).

Male: diagnosis. Apophyses of leg II markedly differentiated (Fig. 28). Description. Idiosoma measurements — $510 \times 295 \mu\text{m}$. Dorsal and ventral sides shown in Figs. 25 and 26, respectively. Gnathosoma (Fig. 27 A): laciniae serrated nearly to end, laminae long, narrow and slightly bent. All setae of gnathosoma smooth. Tectum (Fig. 27 B). Chelicera (Fig. 27 C): digitus mobilis of right chelicera having a fairly large tooth apically. Digitus fixus with 10

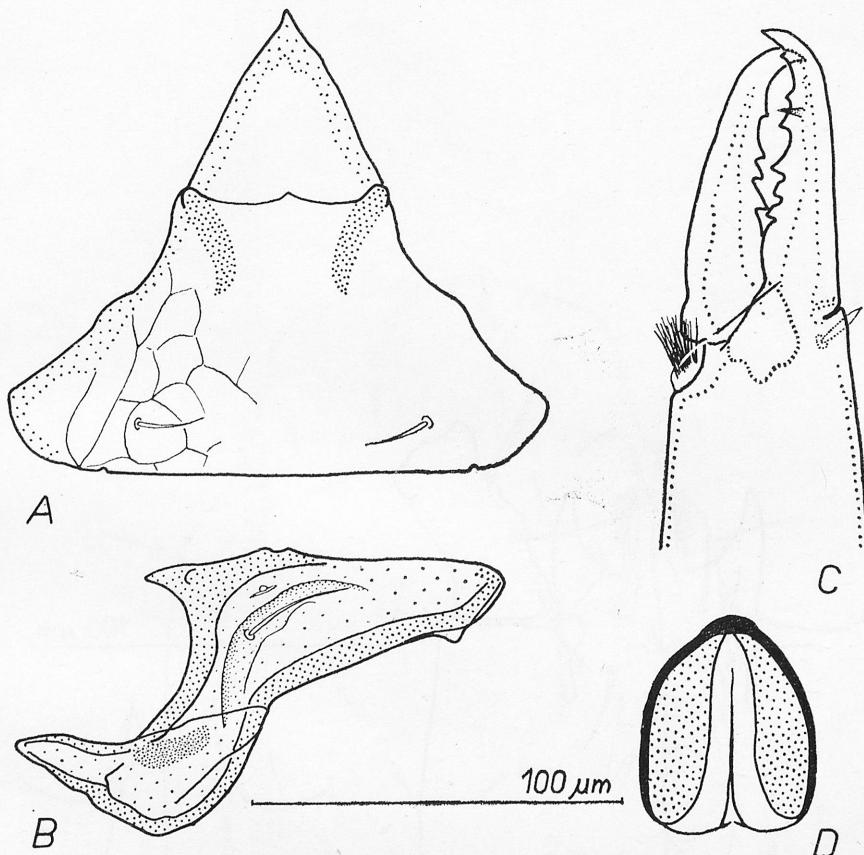


Fig. 23. *Leptogamasus succineus* n. sp., Female (Holotype). A — Epigynum, B — Paragynium, C — Chelicera, D — Endogynium

small uniform teeth (3 in front of and 7 behind pilus dentilis). Characteristic shapes and distribution of apophyses on leg II shown in Fig. 28. Apophyses on *Ge* and *Ti* and calcar on *Fe* laminar and intensely coloured.

Type localities: two specimens of this species, a female (Parasit. No. 591 A) and a male (Parasit. No. 593 A), were found in the litter of the beech forest on Cergowa Mt. near Dukla (south-eastern Poland) on 12 Oct. 1969.

Systematics: female *L. succineus* is similar to female *L. semisicatus* ATHIAS 1967, however digitus fixus of chelicera *L. succineus* has few small teeth in front of pilus dentilis. Also thickening patterns of epigynium have another shape. Male *L. succineus* has no pointed tubercle on the dorsal surface of *Ti* II which is present in male *L. serruliger* ATHIAS, 1967 (most similar to male *L. succineus*).

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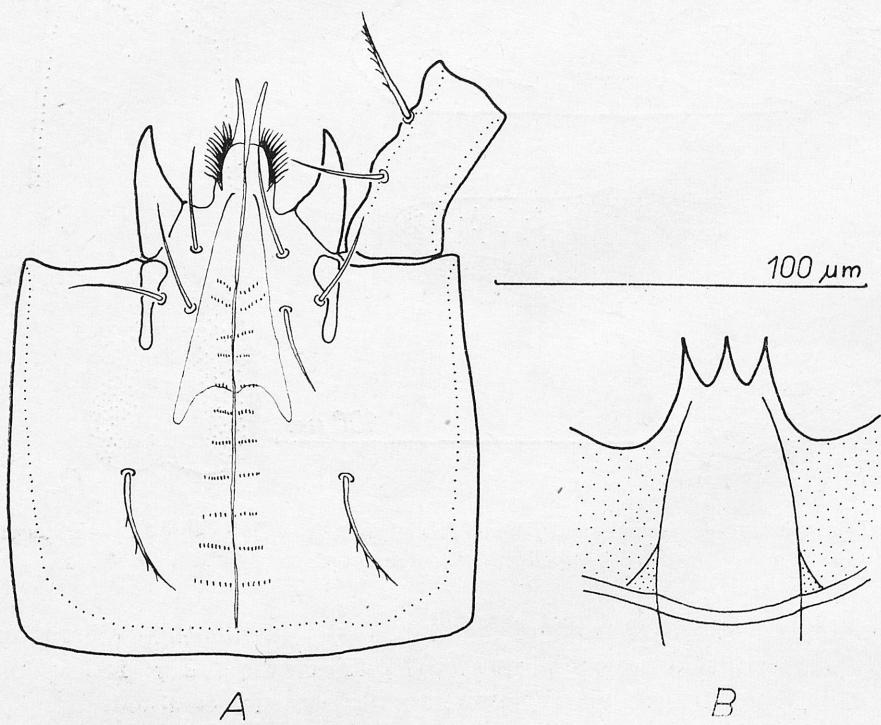


Fig. 24. *Leptogamasus succineus* n. sp., Female (Holotype). A — Gnathosoma, B — Tectum

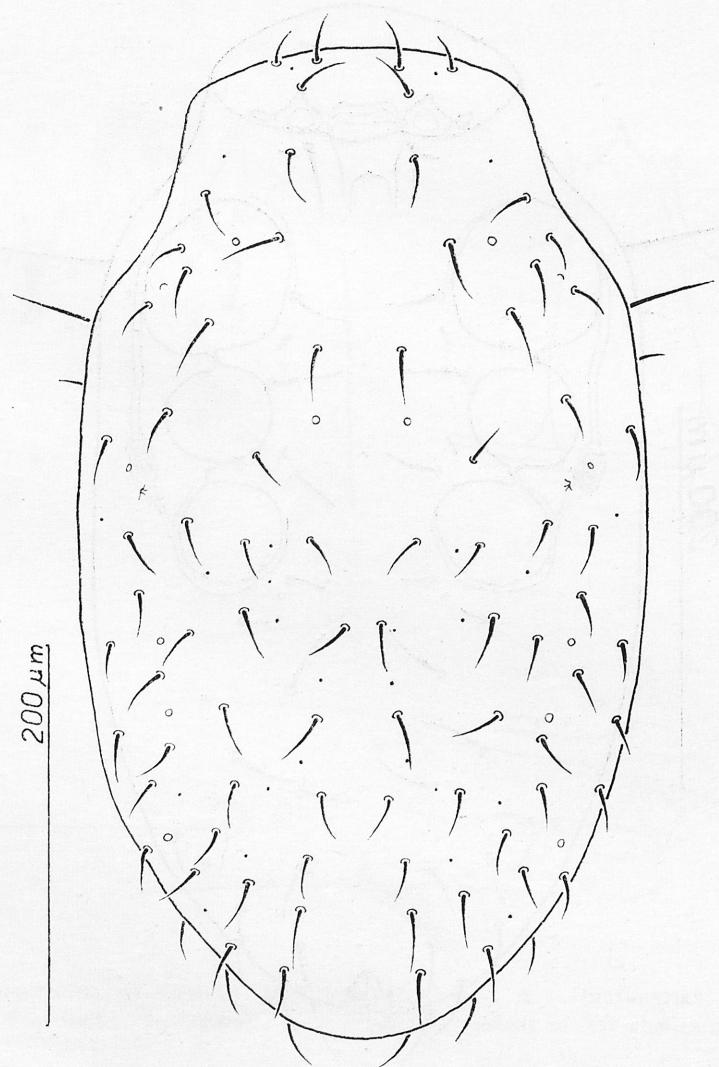


Fig. 25. *Leptogamasus succineus* n. sp., Male (Paratype). Dorsal side of idiosoma

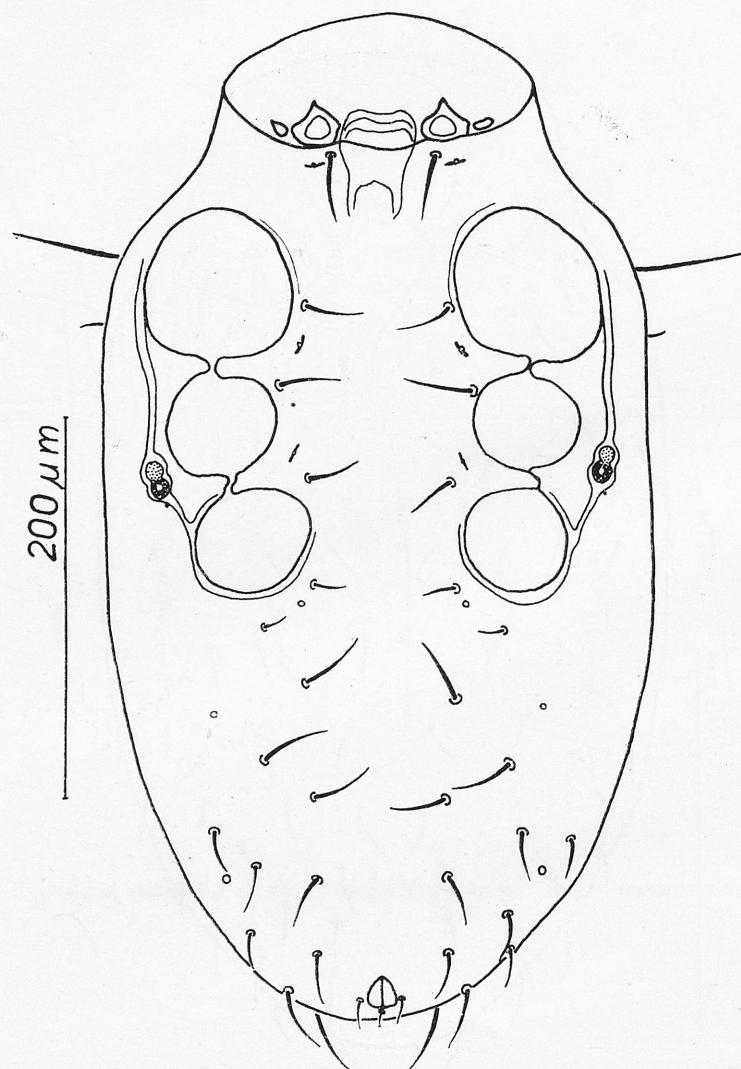


Fig. 26. *Leptogamasus succineus* n. sp., Male (Paratype). Ventral side of idiosoma

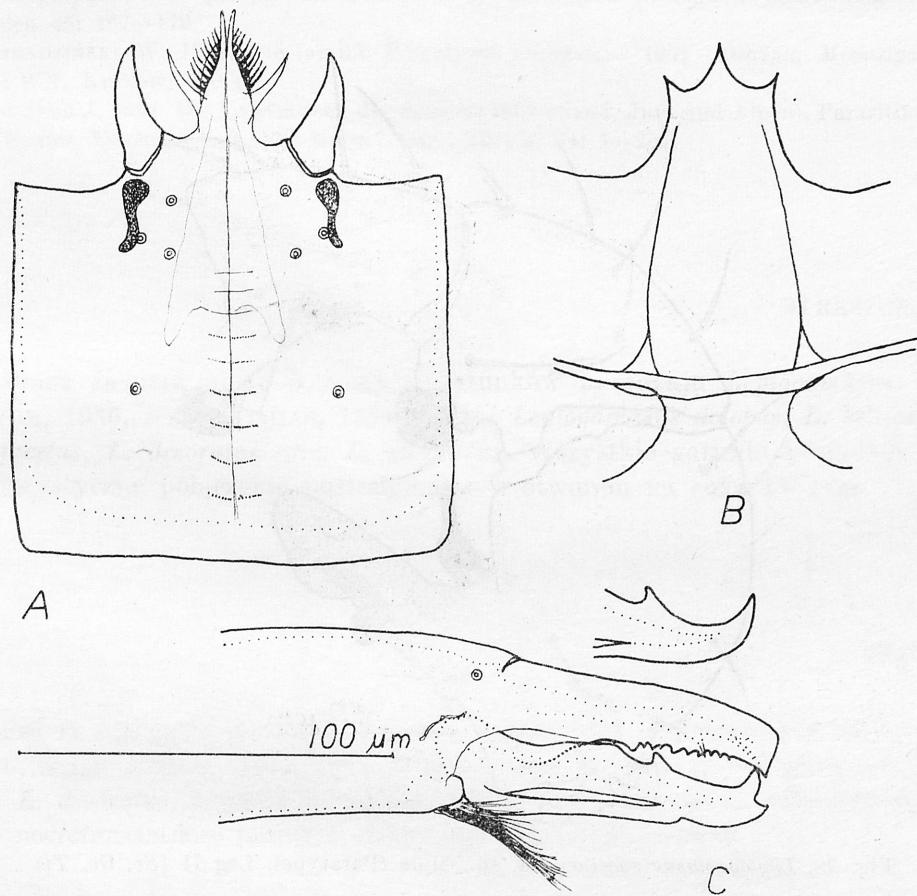


Fig. 27. *Leptogamasus succineus* n. sp., Male (Paratype). A — Gnathosoma, B — Tectum, C — Right chelicera and part of digitus mobilis of left chelicera

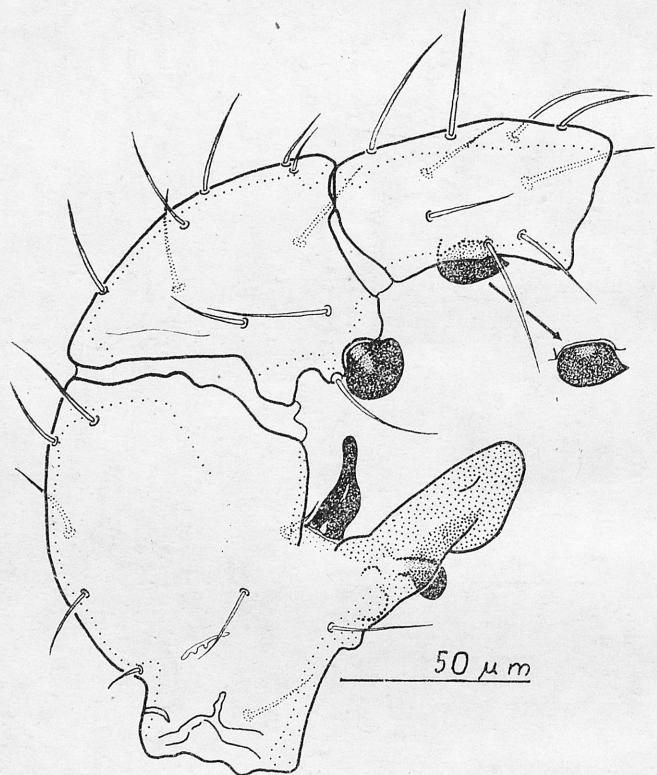


Fig. 28. *Leptogamasus succineus* n. sp., Male (Paratype). Leg II (Fe, Ge, Ti)

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STRESZCZENIE

Praca zawiera opisy 5 nowych gatunków z rodzaju *Leptogamasus* TRÄGÅRDH, 1936, sensu ATHIAS, 1971. Są to: *Leptogamasus dolosus*, *L. belligerens*, *L. facetus*, *L. decoratus* oraz *L. succineus*. Wszystkie gatunki posiadają charakterystyczne połączenie poststigmalne z otworem na coxę IV nogi.

РЕЗЮМЕ

Работа содержит описание 5 новых видов рода *Leptogamasus* TRÄGÅRDH, 1936, sensu ATHIAS, 1971. Это *Leptogamasus dolosus*, *L. belligerens*, *L. facetus*, *L. decoratus*, а также *L. succineus*. Все виды отличаются характерной связью постстигмального щитка с отверстием для IV конечности.

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