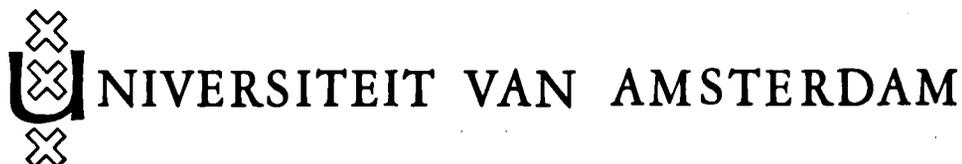


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## SPECIES OF THE GENUS *AMBLYSEIUS* BERLESE, 1914, FROM TAMATAVE, EAST MADAGASCAR (ACARINA: PHYTOSEIIDAE)

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### ABSTRACT

Seven new species of the genus *Amblyseius* are described: *Amblyseius (Proprioiseiopsis) parasundi*, *A. (A.) tamatavensis*, *A. (A.) passiflorae*, *A. (A.) reptans*, *A. (A.) ivoloinae*, *A. (A.) ovaloides*, *A. (A.) aequidens*. All species were collected on fruit trees except *A. passiflorae*. *A. parasundi* is a thelytokous species. *A. (A.) bibens* Blommers, 1973, and *A. (A.) brevipes* Blommers, 1973, are recorded from the Tamatave region.

### INTRODUCTION

Twice in the course of 1972 (February and July), I had the opportunity to visit the experimental station of the I.F.A.C. (Institut Français de Recherches Fruitières Outre Mer) at Ivoloïna, 10 km north of Tamatave, and to study the fruit tree spider mites and their phytoseiid enemies.

Nine species of the genus *Amblyseius* were found, seven of which undescribed; the remaining two species were described recently from the southwest part of the island (Blommers, 1973).

I have made an attempt to compare my new spe-

cies with the many hundreds of *Amblyseius*-species from all over the world, with emphasis on those from the Old World tropics. The nomenclature of the dorsal setae is as illustrated in fig. 6 (cf. Blommers, 1973).

I have followed the subgeneric division of the genus *Amblyseius* used by Van der Merwe (1968) in his recent monograph on the South African Phytoseiidae.

Holotypes and paratypes will be deposited in the Institute of Taxonomic Zoology (Zoölogisch Museum) of the University of Amsterdam.

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*Amblyseius (Proprio-seiopsis) parasundi*  
sp. n. (figs. 1-5)

Material studied.- Holotype ♀ (author's serial no. A20-8) and 10 ♀ paratypes (A20-series) collected on breadfruit leaves (*Artocarpus incisa*; fam. Moraceae), I.F.A.C.-station, Ivoloina near Tamatave, 25-VII-1972 (L. Blommers).

Differential diagnosis.- The subgenus *Proprio-seiopsis* Muma, 1961, is characterized by a number of 15 or 16 setae on the female dorsal shield, at the same time both setae Z1 and J2, or only one of these, absent. *A. parasundi* and the two African species *A. sundi* Pritchard & Baker, 1962, and *A. papayana* Van der Merwe, 1965, are the only three species in this subgenus lacking seta Z1, and possessing J2. *A. parasundi* is most closely related to *A. sundi*, and differs in the shorter length of seta Z5 and the macrosetae on leg IV. The occurrence in central Madagascar of a form that I identified as the genuine *A. sundi*, also justifies my opinion that *A. parasundi* is a good new species.

Description.- Female: Dorsal shield weakly sclerotized and smooth, 370µ long and 290µ wide; with 18 pairs of pores; 16 pairs of setae, length in microns: j1 40, j3 52, j4 3, j5 3, j6 3, J2 5, J5 4, z4 6, z5 3, Z4 170, Z5 430, s2 10, s4 165, S2 7, S4 9, S5 7. Setae r2 and R1 on interscutal membrane, 22µ and 10µ long, respectively. Peritremes reaching in front of setae j1.

Sternal and genital shield as usual. Ventrianal shield 125µ long and 80µ wide, laterally constricted, with three pairs of pre-anal setae. Surrounding membrane with five pairs of pores and four pairs of setae; VL1 90µ long.

Length tarsus IV (including basitarsus) 180µ. Six macrosetae on leg IV: two on genu 190µ and 55µ, two on tibia 140µ and 50µ, two on basitarsus 85µ and 30µ long. Length of remaining macrosetae: genu III 70µ, tibia III 55µ, tarsus III 40µ, genu II 50µ and genu I 70µ.

Fixed digit of chelicera with two subapical teeth and eleven in a row. Movable digit with three teeth. Length of both digits 38µ.

Major duct of spermatheca thin walled, 2µ wide and at least 10µ long. Atrium thick walled, 10µ long. Cervix slender and tube-like, minimum width 3µ, length 35µ (see fig. 3).

Remarks.- *A. parasundi* is a thelytokous species. Both in the field and in several mass-rearings in the laboratory males were never found, while the progeny of females isolated individually since the egg-stage consisted entirely of reproducing females; the third generation being females, too. Thelytoky was observed in only two other species of Phytoseiidae: in *A. guatemalensis* (Chant, 1959) [= *A. elongatus* (Garman, 1958), nec (Oudemans, 1930)] by Kennett (1958) and in *A. deleari* Muma & Denmark, 1970 [= *A. largoensis* Muma, 1961, nec (Muma, 1955)] by Van der Merwe (1968).

*Amblyseius (Amblyseius) tamatavensis*  
sp. n. (figs. 6-12)

Material studied.- Holotype ♀ (author's serial no. A32-2) and 2 ♀ paratypes (A32-1&3) from combava leaves (*Citrus (Papeda) hystrix*; fam. Rutaceae), I.F.A.C.-station Ivoloina, near Tamatave, 1-VIII-1972 (L. Blommers). Other paratypes: 4 ♀ and 4 ♂ (A10. 2k 1 to 8) from a mass-rearing, started with specimens from lemon leaves (*Citrus limon*), S.I.C.O.E.-plantation, Ivoloina, Tamatave, on 8-VII-1972.

Differential diagnosis.- *A. tamatavensis* resembles *A. anomalus* Van der Merwe, 1968. It differs from this species in the greater length of setae s4, Z4 and Z5 and of the three macrosetae on leg IV, and in the shape of the spermatheca. *A. tamatavensis* is also related to *A. obtusus* Koch, 1839, sensu Karg, 1960, from which it differs in the smaller size of the same setae.

Description.- Female: Dorsal shield smooth, 340µ long and 250µ wide; with 20 pairs of pores; 17 pairs of setae, length in microns: j1 32, j3 54, j4 4, j5 3, j6 3, J2 5, J5 6, z4 6, z5 3, Z1 5, Z4 115, Z5 250, s2 6, s4 88, S2 5, S4 6, S5 6. r2 and R1 on interscutal membrane, respectively 15µ and 5µ long. Peritremes reach beyond setae j1.

Sternal and genital shields as usual. Ventrianal shield 120µ long and 100µ wide, not imbricate, smooth; with three pairs of pre-anal setae. Eight pairs of pores in surrounding membrane; four pairs of setae; VL1 84µ long.

Length tarsus IV 120µ. Leg IV with four macrosetae: on genu 120µ and 32µ, on tibia 75µ and on basitarsus 73µ long. Macrosetae present on other legs: genu III 61µ, tibia III 41µ, basitarsus III 22µ, genu II 39µ, genu I 41µ.

Fixed digit of chelicera with two subapical teeth and 12 in an irregular row. Movable digit with three teeth. Length of both digits about 35 $\mu$ .

Major duct of spermatheca well defined, 30 $\mu$  long and 4 $\mu$  wide. Atrium small. Cervix tube-like, 16 $\mu$  long, hardly widening towards the end, about 4 $\mu$  wide.

Male: r2 and R1 on dorsal shield. Length of dorsal setae (in microns): j1 26, j3 54, j4 4, j5 3, j6 4, J2 5, J5 5, z4 5, z5 3, Z1 5, Z4 85, Z5 170, s2 4, s4 60, S2 5, S4 5, S5 5, r2 12, R1 5.

Ventri-anal shield 110 $\mu$  long, imbricate anteriorly, with three pairs of pre-anals. Surrounding membrane with three pairs of pores and setae VL1 40 $\mu$  long.

Macrosetae on leg IV: on genu 66 $\mu$ , on tibia 45 $\mu$  and on basitarsus 55 $\mu$  long.

Fixed digit of chelicera with one subapical tooth and seven teeth in a row. Movable digit with one small tooth, and L-shaped spermatophoral process. Major portion of the latter 17 $\mu$  long; branch 20 $\mu$ , parallel-sided, with somewhat bulged end.

*Amblyseius (Amblyseius) passiflorae*  
sp. n. (figs. 13-20)

Material studied.- Holotype ♀ (author's serial no. A7-15) and 3 ♀ paratypes (A7-series) collected on *Passiflora foetida* (fam. Passifloraceae), I.F.A.C.-station, Ivoloina near Tamatave, 5-VII-1972 (L. Blommers). Two paratypes (♀ and ♂; A19-5 and A19-3) from the same species of plant and the same locality, 24-VII-1972 (L. Blommers).

Differential diagnosis.- *A. passiflorae* resembles *A. largoensis* (Muma, 1955) (= *A. neolargoensis* Van der Merwe, 1965), *A. deleari* Muma & Denmark, 1970 (= *A. largoensis* Muma, 1961, sensu Van der Merwe, 1968), and *A. impactus* Chaudri, 1968. All these species have about ten teeth on the fixed digit of the chelicera of the female; setae s4, Z4 and Z5 whip-like; the cervix of the spermatheca more or less elongated and tube-like; and the ventri-anal shield constricted in the middle. *A. passiflorae* resembles African *A. deleari* most of all. From this species it differs in the more compact shape of the spermathecal major duct and cervix and in the greater difference in length between setae j1 and j3.

Description.- Female: Dorsal shield smooth, 360 $\mu$  long and 240 $\mu$  wide; with 18 pairs of pores;

17 pairs of setae, length in microns: j1 34, j3 50, j4 7, j5 8, j6 10, J2 10, J5 8, z4 10, z5 6, Z1 10, Z4 94, Z5 260, s2 15, s4 85, S2 12, S4 12, S5 10, r2 and R1 on interscutal membrane and both 12 $\mu$  long. Peritremes ending in front of setae j1.

Sternal and genital shield as usual. Ventri-anal shield 105 $\mu$  long and 70 $\mu$  wide, constricted on level of pre-anal pores. Three pairs of pre-anals. Eight pairs of pores in surrounding membrane; four pairs of setae, VL1 60 $\mu$  long.

Length of tarsus IV 145 $\mu$ . Macrosetae present on legs: genu IV 115 $\mu$  and 22 $\mu$ , tibia IV 90 $\mu$ , basitarsus IV 70 $\mu$ , genu III 45 $\mu$ , tibia III 42 $\mu$ , basitarsus III 30 $\mu$ , genu II 36 $\mu$ , genu I 42 $\mu$ .

Fixed digit of chelicera 33 $\mu$  long; with two subapical teeth, and nine teeth in a row; movable digit (33 $\mu$ ) with three teeth.

Major duct of spermatheca clearly defined, about 20 $\mu$  long and 4 $\mu$  wide. Atrium bulbous. Cervix somewhat swollen, 9 $\mu$  wide and 16 $\mu$  long.

Male: Length dorsal shield 260 $\mu$ , width 180 $\mu$ . r2 and R1 on dorsal shield. Length of setae (in microns): j1 25, j3 43, j4 6, j5 5, j6 7, J2 9, J5 7, z4 8, z5 5, Z1 9, Z4 64, Z5 195, s2 11, s4 67, S2 10, S4 10, S5 8, r2 8, R1 8.

Ventri-anal shield slightly imbricate, fused with peritremal shields, 100 $\mu$  long.

Macrosetae on legs: genu IV 62 $\mu$ , tibia IV 50 $\mu$ , basitarsus IV 50 $\mu$ , genu III 45 $\mu$ , tibia III 42 $\mu$ , basitarsus III 30 $\mu$ .

Fixed digit of chelicera with one subapical tooth, and nine teeth in a row. Movable digit with one tooth. Spermatophoral process L-shaped; major portion 15 $\mu$  long; branch 14 $\mu$  and pointedly ending. Length fixed digit 26 $\mu$ , movable digit 24 $\mu$ .

*Amblyseius (Amblyseius) reptans*  
sp. n. (figs. 21-27)

Material studied.- Holotype ♀ (author's serial no. A26-15) and 7 paratypes (4 ♀ and 3 ♂; A26-series) from guava leaves (*Psidium guajava*; fam. Myrtaceae), Tamatave, 28-VII-1972 (L. Blommers).

Differential diagnosis.- *A. reptans* resembles closely *A. dimidiatus* De Leon, 1962, from Florida, U.S.A., but differs in the greater length of dorsal setae Z4 and Z5 and in the shorter length of VL1.

Description.- Female: Dorsal shield laterally

reticulate, 290 $\mu$  long and 190 $\mu$  wide; with 19 $\mu$  pairs of pores; 17 pairs of setae, length in microns: j1 21, j3 15, j4 8, j5 7, j6 10, J2 10, J5 7, z4 16, z5 18, Z1 10, Z4 48, Z5 70, s2 16, s4 25, S2 18, S4 15, S5 14. Z4 and Z5 serrate. r2 and R1 on interscutal membrane, both 15 $\mu$  long. Peritremes reach in front of setae j1.

Ventral and genital shield as usual. Ventri-anal shield pentagonal, 98 $\mu$  long and 78 $\mu$  wide, with three pairs of pre-anals. Eight pairs of pores in surrounding membrane; four pairs of setae, VL1 24 $\mu$  long.

Macrosetae on leg IV: on genu 27 $\mu$ , on tibia 20 $\mu$ , and on basitarsus 50 $\mu$  long. Macrosetae on other legs hardly longer than normal setae, but more dagger-like: on genu, tibia, tarsus of leg III, and on genu II and I. In some specimens some macrosetae with knobbed end.

Fixed digit of chelicera with two subapical teeth and six in a row. Movable digit with three teeth. Both digits 26 $\mu$  long.

Spermatheca with major duct 2 $\mu$  wide and 16 $\mu$  long. Atrium short. Cervix long and slender, parallel-sided for most of its length, 45 $\mu$  long and 2 $\mu$  wide.

Male: Dorsal shield as in female; 250 $\mu$  long and 170 $\mu$  wide. r2 and R1 on dorsal shield. Length (in microns): j1 16, j3 20, j4 7, j5 8, j6 8, J2 8, J5 3, z4 16, z5 6, Z1 9, Z4 20, Z5 35, s2 16, s4 20, S2 20, S4 15, S5 13, r2 14, R1 13. Z4 and Z5 serrate.

Ventri-anal shield 105 $\mu$  long, with three pairs of pre-anals and five pairs of pores; fused with peritremal shields. Surrounding membrane with two pairs of pores and VL1 17 $\mu$  long.

Macrosetae on leg IV: on genu 19 $\mu$ , on tibia 15 $\mu$  and on basitarsus 45 $\mu$  long.

Fixed digit of chelicera with one subapical tooth and seven teeth in a row. Movable digit with one tooth; spermatophoral process L-shaped; major portion 15 $\mu$ , branch 9 $\mu$  long.

*Amblyseius (Amblyseius) ivoloinae*  
sp. n. (figs. 28-34)

Material studied.- Holotype ♀ (author's serial no. A28-8) and 7 paratypes (5 ♀ and 2 ♂: A28-series) from lemon leaves (*Citrus limon*: fam. Rutaceae), S.I.C.O.E.-plantation, Ivoloina near Tamatave, 29-VII-1972 (L. Blommers).

Differential diagnosis.- *A. ivoloinae* resembles *A. culmulus* Van der Merwe, 1968, and *A. shi* Pritchard & Baker, 1962. However, the shorter dorsal setae and macrosetae on leg IV distinguish it from the former, and the shape of the spermatheca from the latter.

Description.- Female: Dorsal shield reticulate laterally, imbricate in the centre, 320 $\mu$  long and 230 $\mu$  wide; with 20 pairs of pores; 17 pairs of setae, length in microns: j1 15, j3 18, j4 10, j5 10, j6 10, J2 12, J5 8, z4 10, z5 10, Z1 10, Z4 26, Z5 60, s2 14, s4 18, S2 12, S4 10, S5 10. Z4 and Z5 serrate. Peritremes reach in front of j1. r2 and R1 on interscutal membrane, both 12 $\mu$  long.

Sternal and genital shield as usual. Ventri-anal shield pentagonal, laterally faintly constricted, 105 $\mu$  long and 80 $\mu$  wide, with three pairs of pre-anals. Surrounding membrane with eight pairs of pores and four pairs of setae; VL1 35 $\mu$  long.

Macrosetae on leg IV: on genu 40 $\mu$ , on tibia 32 $\mu$  and on basitarsus 50 $\mu$  long. In some specimens these macrosetae knobbed. Macrosetae on other legs short and dagger-like, the longest on genu III (28 $\mu$ ).

Fixed digit of chelicera 25 $\mu$  long, with two subapical teeth and six in a row. Movable digit 27 $\mu$  long, with three teeth.

Spermatheca with major duct long and slender at least 25 $\mu$  long, and 1 $\mu$  wide. Atrium small, cervix practically nil.

Male: Dorsal shield as in female, 270 $\mu$  long and 190 $\mu$  wide; r2 and R1 on it. Length of setae (in microns): j1 15, j3 25, j4 9, j5 8, j6 9, J2 10, J5 7, z4 9, z5 8, Z1 10, Z4 25, Z5 45, s2 10, s4 15, S2 10, S4 9, S5 8, r2 11, R1 10. Z4 and Z5 serrate.

Ventri-anal shield not fused with peritremal shields, 95 $\mu$  long, with five pairs of pores and three pairs of pre-anals. Surrounding membrane with two pairs of pores and VL1 25 $\mu$  long.

Macrosetae on leg IV: on genu 25 $\mu$ , on tibia 23 $\mu$  and on basitarsus 38 $\mu$  long.

Fixed digit of chelicera with one subapical tooth and six teeth in a row. Movable digit with one tooth; spermatophoral process L-shaped; major portion 19 $\mu$  long, branch 9 $\mu$ .

*Amblyseius (Amblyseius) ovaloides*  
sp. n. (figs. 35-41)

Material studied.- Holotype ♀ (author's serial no. A15-2) from combava leaves (*Citrus (Papeda) hystrix*; fam. Rutaceae), I.F.A.C.-station, Ivoloina near Tamatave, 18-VII-1972 (L. Blommers). Four ♀ paratypes (A2-series) from avocado leaves (*Persea americana*; fam. Lauraceae) at the same locality as the holotype, 8-II-1972 (L. Blommers).

Differential diagnosis.- Comparison of our specimens with the original description of *A. ovalis* (Evans, 1953) from Malaya, and with the description of Japanese *A. ovalis* by Ehara (1967) reveals only slight differences. In table I some comparative measurements are given (in microns). Other noteworthy differences are the smooth dorsal shield described by Evans, in contrast to the reticulate shield observed by Ehara and myself. A median lobe of the sternal shield in the female is present only in *A. ovaloides*. Because distinguishing marks are rather scarce in the *ovalis*-group (cf. Blommers, 1973), I prefer to consider *A. ovaloides* a good species.

Within the Malagasy fauna *A. ovaloides* comes close to *A. brevipes* Blommers, 1973, and *A. rotundus* Blommers, 1973, but the shape of the spermatheca and the ventri-anal shield in the female of the latter two species is quite different.

Description.- Female: Dorsal shield reticulate anterolaterally, 335 $\mu$  long and 200 $\mu$  wide; with at least 16 pairs of pores; 17 pairs of setae, length in microns: j1 30, j3 8, j4 5, j5 5, j6 6, J2 7, J5 5, z4 8, z5 7, Z1 8, Z4 8, Z5 44, s2 7, s4 12, S2 8, S4 8, S5 7. r2 and R1 on interscutal membrane, both 8 $\mu$  long. Peritremes not reaching level with j3.

Sternal shield with large median lobe. Genital

shield as usual. Ventri-anal shield constricted anteriorly, 100 $\mu$  long and 72 $\mu$  wide; setal arrangement as in *A. ovalis* (see fig. 37). Surrounding membrane with at least four pairs of pores, and four pairs of setae; VL1 22 $\mu$  long.

Length of tarsus IV 125 $\mu$ , including basitarsus of 32 $\mu$ . Length of macrosetae: on genu IV 40 $\mu$ , on tibia IV 32 $\mu$  and on basitarsus IV 58 $\mu$ , on genu III 25 $\mu$  and on tibia III 20 $\mu$ .

Fixed digit of chelicera with one blunt tooth, 28 $\mu$  long. Movable digit with one small tooth, 26 $\mu$  long.

Major duct of spermatheca ill-defined, 9 $\mu$  long and 1 $\mu$  wide. Atrium small. Cervix tubular, 11 $\mu$  long, 1 $\mu$  wide, suddenly widened terminally.

Male: Unknown to the author.

*Amblyseius (Amblyseius) aequidens*  
sp. n. (figs. 42-47)

Material studied.- Holotype ♀ (author's serial no. A10-11) from lemon leaves (*Citrus limon*), S.I.C.O.E.-plantation, Ivoloina near Tamatave, 8-VII-1972 (L. Blommers). Three paratypes (A44-1 ♀ and A44-2 ♂) from the same plants in the same locality, 5-VIII-1972 (L. Blommers).

Differential diagnosis.- A combination of features shown by *A. aequidens* makes it quite unique among species of the genus *Amblyseius*. I do not know of any other species having large multidentate chelicera, a heavily sclerotized dorsal shield, subequal dorsal setae, and a pentagonal ventri-anal shield.

Description.- Female: Dorsal shield strongly sclerotized, 450 $\mu$  long and 350 $\mu$  wide, imbricate in the centre; with at least 18 pairs of pores; 17 pairs of setae, length in microns: j1 25, j3 20, j4 11, j5 12, j6 14, J2 16, J5 9, z4 23, z5

Table I

	<i>A. ovalis</i> Evans (Malaya)	<i>A. ovalis</i> Ehara (Japan)	<i>A. ovaloides</i> sp. n. (Madagascar)
Dorsal setae j1	33	31	27-30
Dorsal setae J5	55	50	45-48
Dorsal setae s4	±20	15	9-12
Remaining dorsal setae	9-11	7-14	5-8
Macrosetae leg IV: genu	39	37	36-40
tibia	37	32	29-34
basitarsus	55	53	52-57

14, Z1 20, Z4 23, Z5 35, s2 14, s4 31, S2 26, S4 28, S5 29. All dorsal setae hair-like. r2 and R1 on interscutal membrane, both 30 $\mu$  long. Peritremes reach nearly in front of setae j1.

Sternal shield posteriorly with median lobe. Genital shield wider (108 $\mu$ ) than ventri-anal shield (85 $\mu$ ). Ventri-anal shield weakly sclerotized (in comparison to other shields), in our specimens difficult to examine; probably pentagonal, with three pairs of pre-anal setae.

Macrosetae on leg IV hardly distinguishable from other setae: on genu 24 $\mu$ , on tibia 20 $\mu$  and on basitarsus 42 $\mu$  long.

Chelicera large; fixed digit 42 $\mu$  long, with one subapical tooth and 2 + 13 teeth in a row. Movable digit 45 $\mu$  long, with 5 (or 6) teeth.

Major duct of spermatheca in our specimens ill-defined. Bifid atrium 16 $\mu$  long. Cervix slender, tube-like, 42 $\mu$  long and 3 $\mu$  wide, widening towards the end.

Male: r2 and R1 on dorsal shield. Length of setae (in microns): j1 20, j3 20, j4 8, j5 9, j6 10, J2 11, J5 5, z4 17, z5 10, Z1 14, Z4 20, Z5 28, s2 11, s4 24, S2 17, S4 20, S5 20, r2 and R1 20.

Ventri-anal shield badly preserved in our specimen. VL1 14 $\mu$ .

Macrosetae on leg IV: on genu 20 $\mu$ , on tibia 18 $\mu$  and on basitarsus 36 $\mu$  long.

Fixed digit of chelicera 25 $\mu$  long, with one subapical tooth, and seven teeth in a row. Movable digit with one tooth; spermatophoral process 23 $\mu$  long, rather swollen terminally, 6 $\mu$  wide, with drop-like branch of about 3 $\mu$  diameter.

*Amblyseius (Amblyseius) brevipes*  
Blommers, 1973

*Amblyseius (Amblyseius) brevipes* Blommers, 1973: 112, figs. 26-28.

This species was originally described from *Carica papaya* in Tuléar and *Diospyros* sp. in Manombo, N. of Tuléar.

Material studied.- 13 ♀ and 1 ♂ (A4-series) from *Carica papaya*, I.F.A.C.-station, Ivoloïna near Tamatave, 8-II-1972 (L. Blommers).

*Amblyseius (Amblyseius) bibens*  
Blommers, 1973

*Amblyseius (Amblyseius) bibens* Blommers, 1973: 111, figs. 12-18.

This species was previously recorded from various annuals in the region of Tuléar.  
Material studied.- 10 ♀ and 1 ♂ (A6-series) from *Phaseolus (lunatus?)*, Ivoloïna, Tamatave, 11-II-1972 (L. Blommers).

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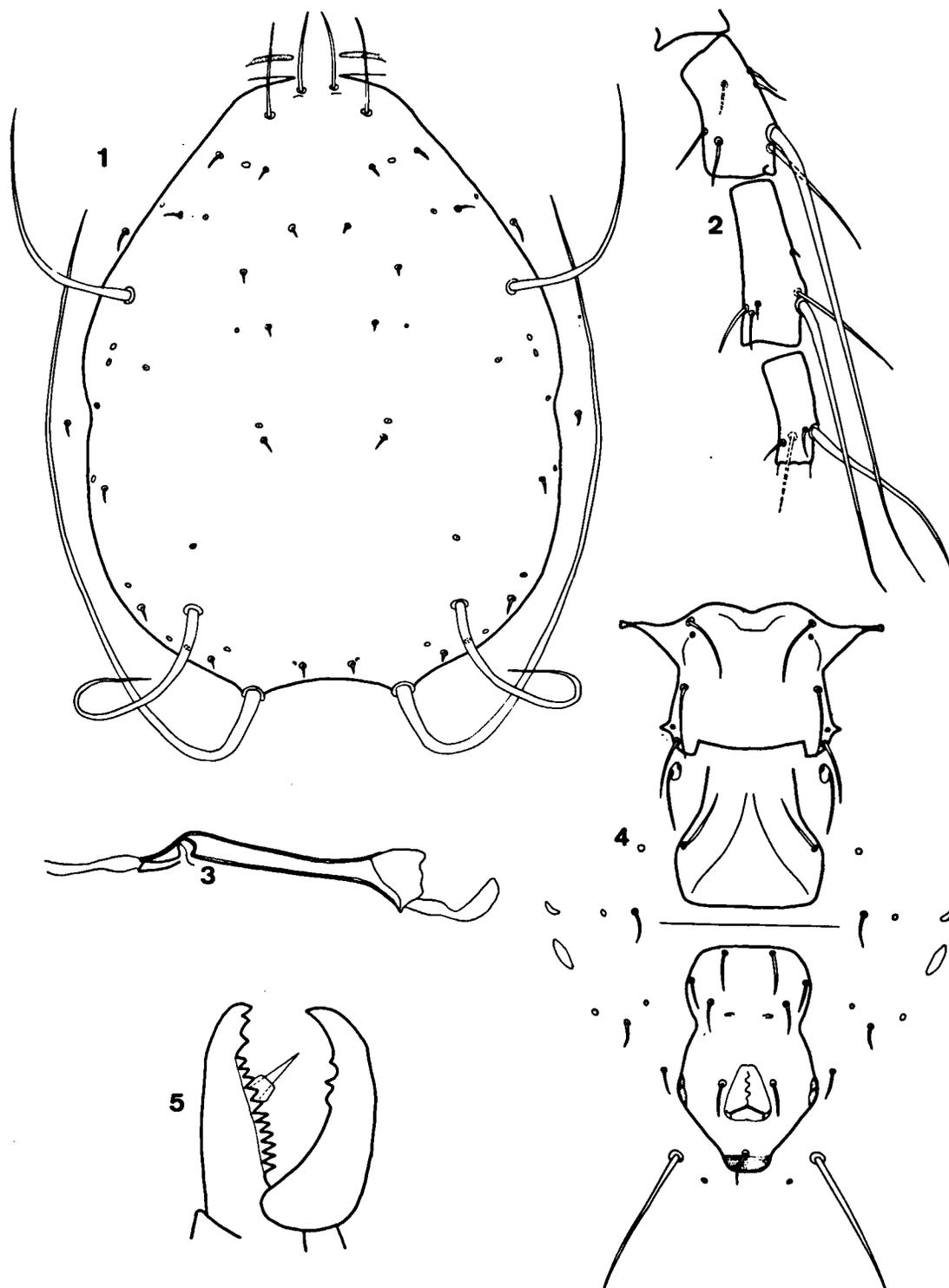
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Universiteit van Amsterdam

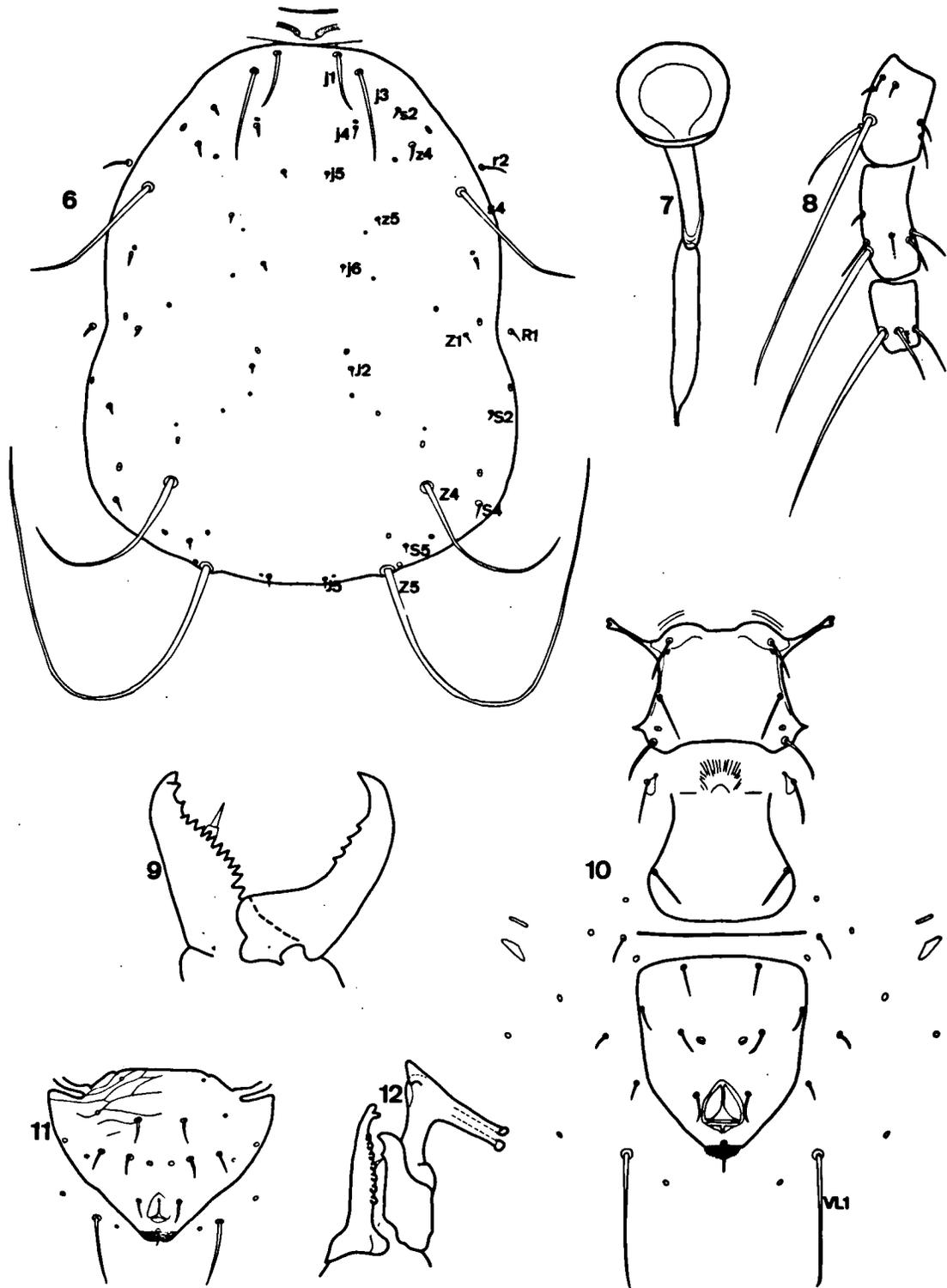
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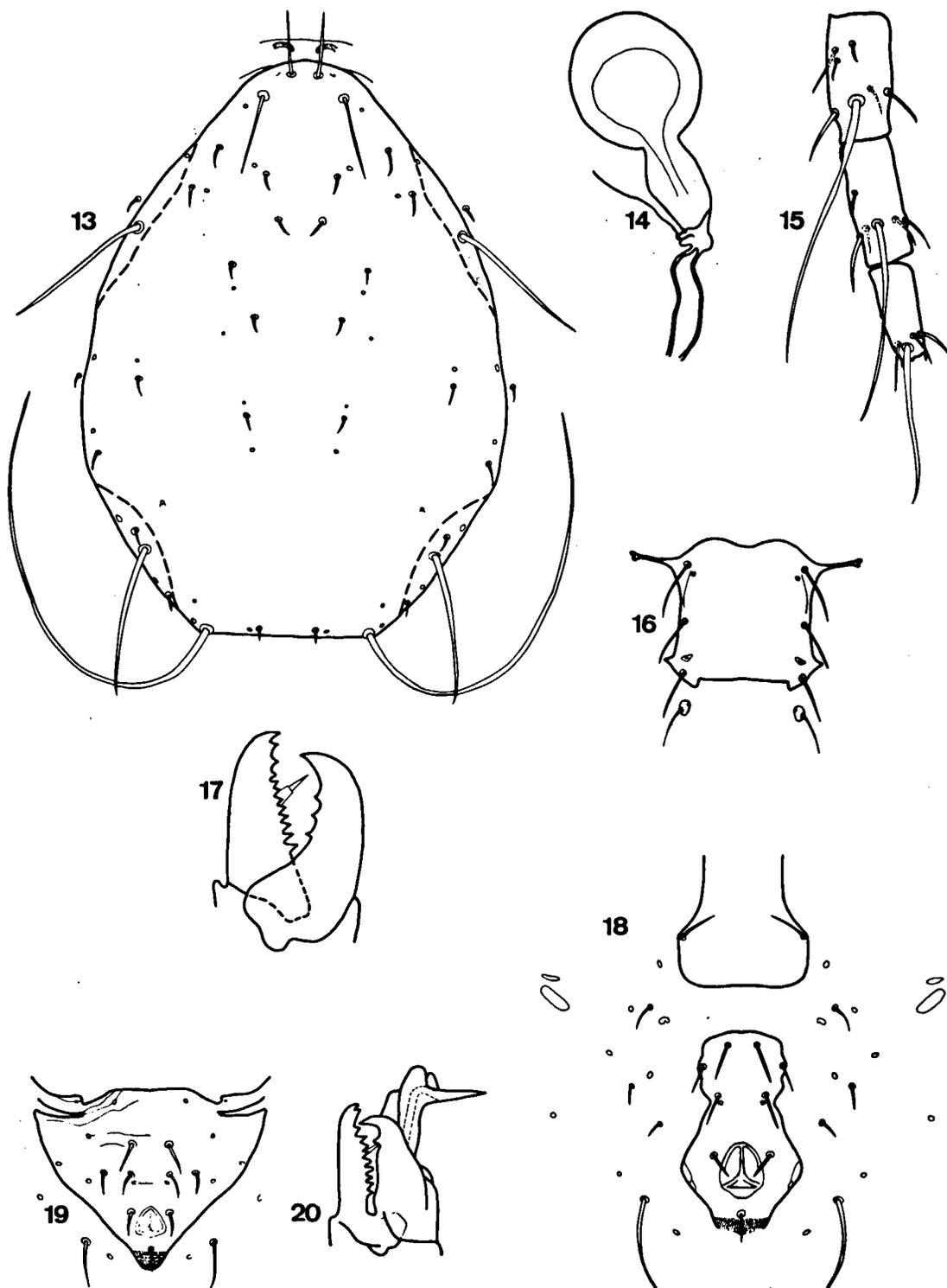
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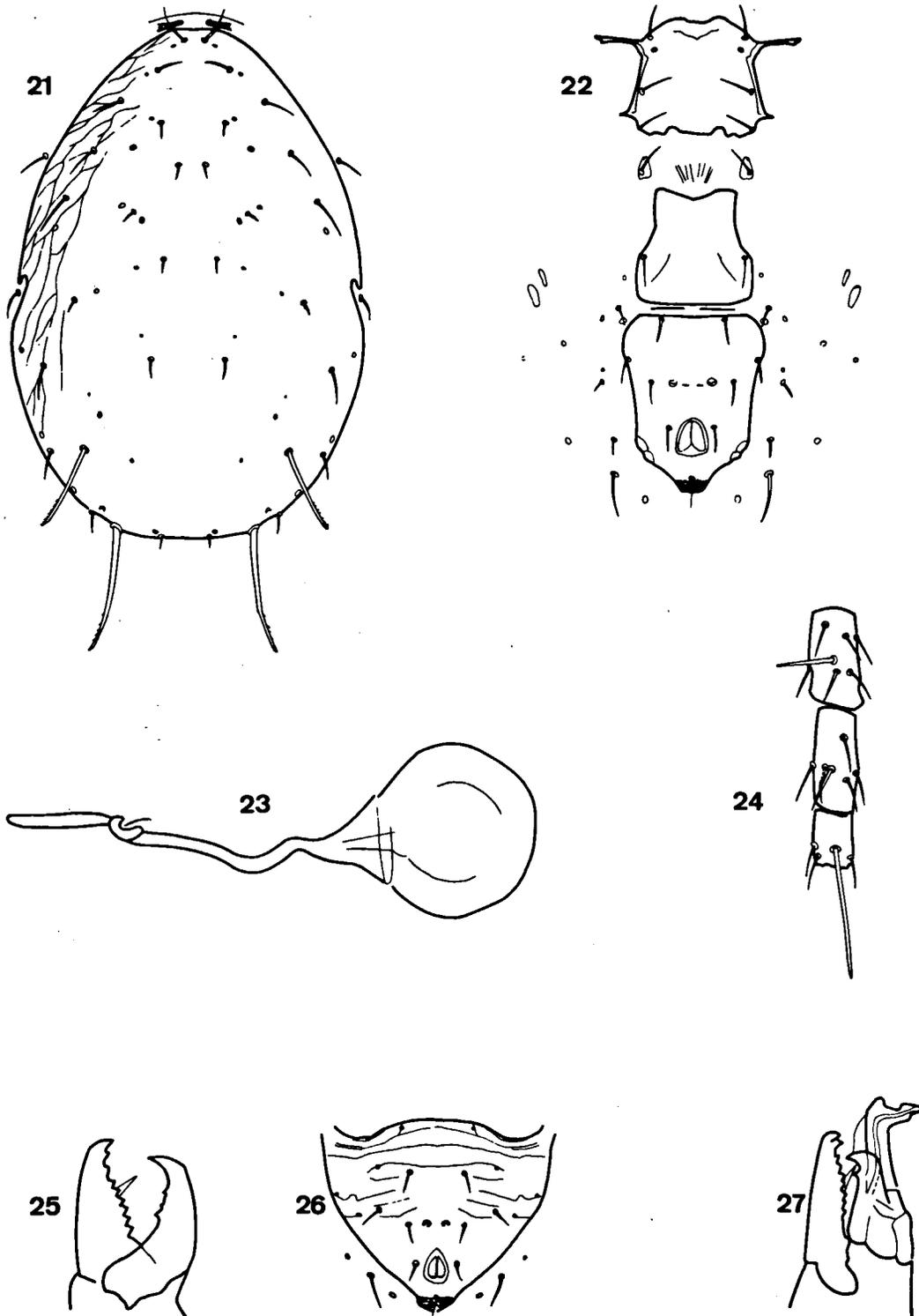
Figs. 1-5. *Amblyseius (Proprioseiopsis) parasundi* sp. n. ♀: 1, dorsum; 2, leg IV; 3, spermatheca; 4, venter; 5, chelicera.



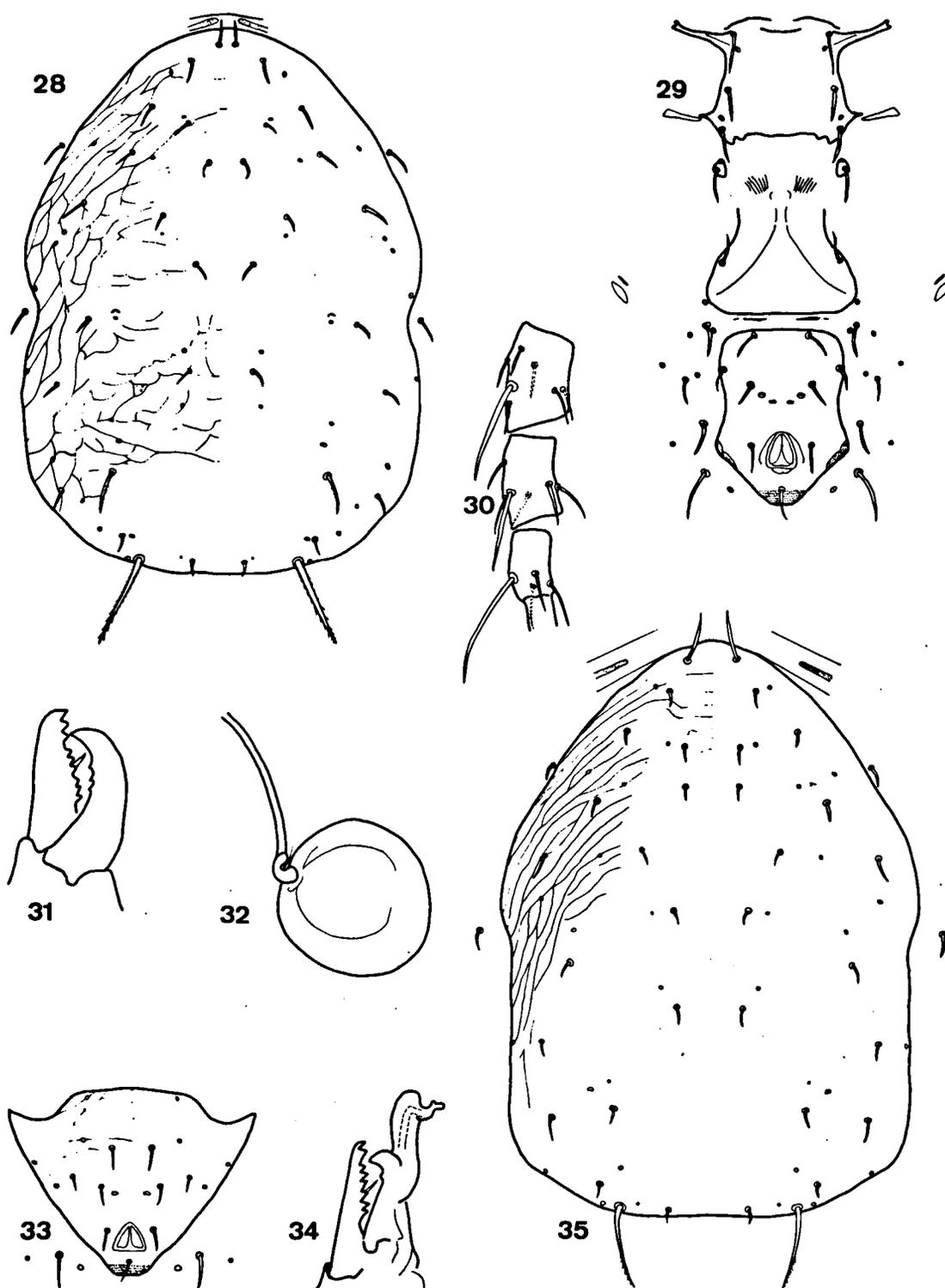
Figs. 6-12. *Amblyseius (Amblyseius) tamatavensis* sp. n. 6-10 ♀: 6, dorsum; 7, spermatheca; 8, leg IV; 9, chelicera; 10, venter; 11-12 ♂: 11, ventri-anal shield; 12, chelicera.



Figs. 13-20. *Amblyseius (Amblyseius) passiflorae* sp. n. 13-18 ♀: 13, dorsum; 14, spermatheca; 15, leg IV; 16, sternal shield; 17, chelicera; 18, genital and ventri-anal shields; 19-20, ♂: 19, ventri-anal shield; 20, chelicera.

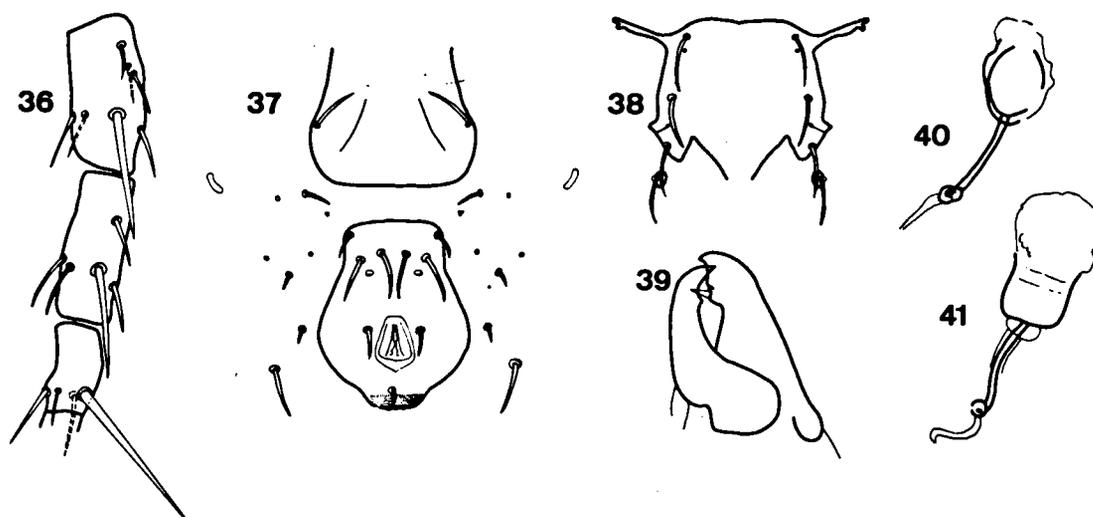


Figs. 21-27. *Amblyseius (Amblyseius) reptans* sp. n. 21-25 ♀: 21, dorsum; 22, venter; 23, spermatheca; 24, leg IV; 25, chelicera; 26-27 ♂: 26, ventri-anal shield; 27, chelicera.

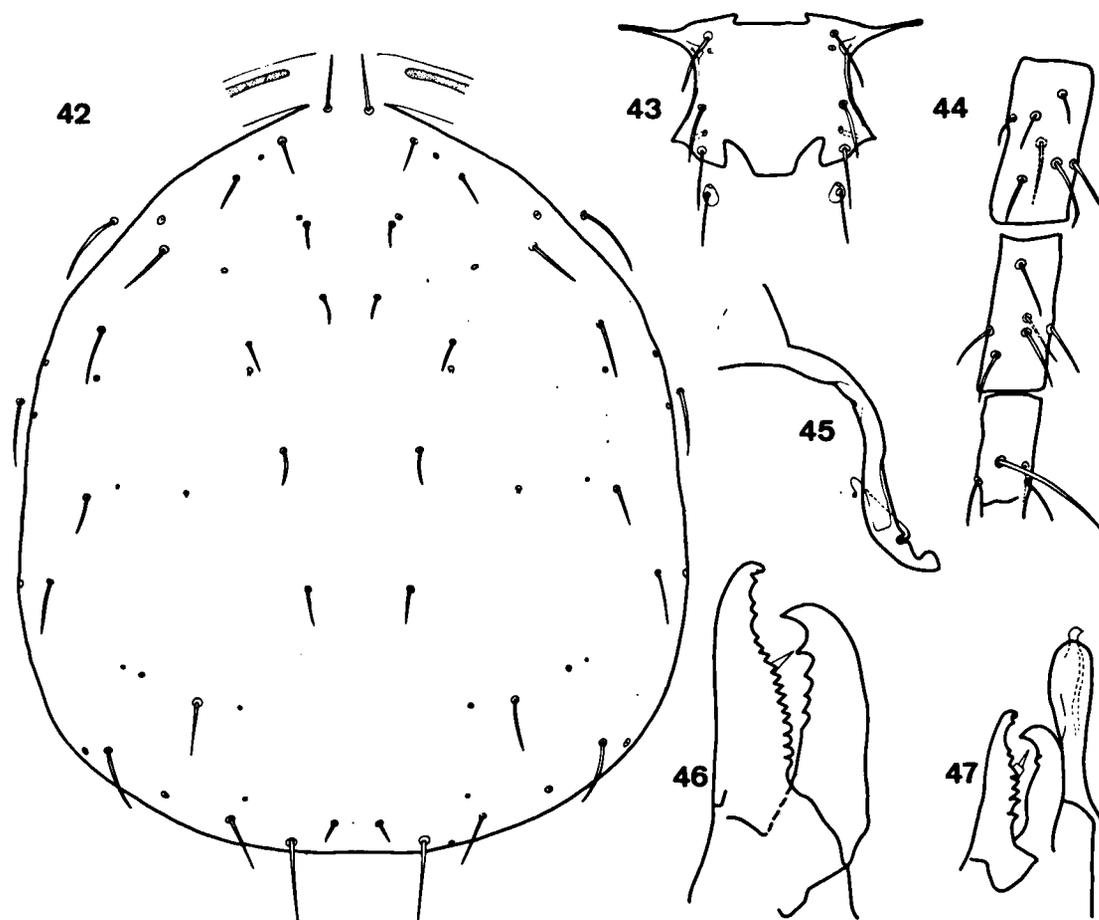


Figs. 28-34. *Amblyseius (Amblyseius) ivoloinae* sp. n. 28-32 ♀: 28, dorsum; 29, venter; 30, leg IV; 31, chelicera; 32, spermatheca; 33-34 ♂: 33, ventri-anal shield; 34, chelicera.

Fig. 35. *Amblyseius (Amblyseius) ovaloides* sp. n. ♀: dorsum.



Figs. 36-41. *Amblyseius (Amblyseius) ovaloides* sp. n. ♀: 36, leg IV; 37, genital and ventri-anal shields; 38, sternal shield; 39, chelicera; 40/41, spermatheca.



Figs. 42-47. *Amblyseius (Amblyseius) aequidens* sp. n. 42-46 ♀: 42, dorsum; 43, sternal shield; 44, leg IV; 45, spermatheca; 46, chelicera; 47 ♂: chelicera.