

**A NEW GENUS AND NEW RECORDS OF PHYTOSEIID MITES
(MESOSTIGMATA: PHYTOSEIIDAE) FROM ISRAEL ***

S. Amitai and E. Swirski

Division of Entomology, Agricultural Research Organization,
The Volcani Center, Bet Dagan, Israel

ABSTRACT

A new genus *Phytocerus* is established in the Amblyseiinae a subfamily of the Phytoseiidae and a new species *Phytocerus desertorum* is described. The following 22 species of phytoseiid mites are recorded from various host plants in Israel: *Amblyseius swirskii* Athias-Henriot, *A. cucumeris* (Oudemans), *A. engaddensis* Amitai and Swirski, *A. barkeri* (Hughes), *A. messor* (Wainstein), *Euseius rubini* (Swirski and Amitai), *E. eitanae* (Swirski and Amitai), *Kampimodromus judaicus* (Swirski and Amitai), *Eharius chergui* (Athias-Henriot), *Iphrseius degenerans* (Berlese), *Phytoseiulus persimilis* Athias-Henriot, *Typhlodromus athiasae* Porath and Swirski, *T. phialatus* Athias-Henriot, *Anthoseius cryptus* (Athias-Henriot), *A. porathi* (Swirski and Amitai), *A. recki* (Wainstein), *A. hierochunticus* (Amitai and Swirski), *A. sternlichti* (Swirski and Amitai), *Clavidromus transvaalensis* (Nesbitt), *Seiulus amaliae* Ragusa and Swirski, *S. isotrichus* Athias-Henriot, *Phytoseius finitimus* Ribaga.

This work presents results of surveys carried out in Israel since 1959 on the distribution and phenology of predacious mites belonging to the family Phytoseiidae.

Mites were preserved in 70% alcohol, cleared in Nesbitt's solution (chloral hydrate 8, hydrochloric acid 0.5, water 5), and mounted in Hoyer's fluid. The setal terminology of Garman (1948) and Nesbitt (1951), the adenotaxie, poroidotaxie and sigillotaxie of Athias-Henriot (1969, 1970), as well as the leg chaetotaxy of Evans (1963), were followed.

Depository collections mentioned hereafter are abbreviated as follows:

ARO - Agricultural Research Organization, Division of Entomology, Bet Dagan, Israel.

BCF - Berlese's Collection, Florence, Italy.

BM - British Museum (Natural History), London.

CNC - Canadian National Collection.

IAO - Institute of Acarology, Ohio Agricultural Research and Development Center, Wooster, Ohio, U.S.A.

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- IBIWR - Institute of Biology of Inland Waters, USSR Academy of Sciences, Borok, Yaroslavl District, USSR.
 IEAP - Istituto di Entomologia Agraria, the University of Palermo, Italy.
 LAEPP - Laboratoire d'Acarologie de l'Ecole Pratique des Hautes Etudes, Paris.
 MNHP - Museum National d'Histoire Naturelle, Paris, France.
 RNHL - Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands.

The following abbreviations are used for the various regions of Israel:

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|-----------------------------|---------------------|
| G - Galilee (HaGalil) | S- Sinai |
| | Sh.-Sharon |
| GH- Golan Heights (HaGolan) | She.- Shefela |
| HV- Hula Valley | Shom.-Shomron |
| JH- Judean (Yehuda) Hills | |
| JV- Jordan Valley | WG-Western Galilee |
| MC-Mt. Carmel | YV- Yizre'el Valley |
| N- Negev | |

Phytocerus n. gen.

Female: Dorsal shield strongly sclerotised, covered with "wax plates" (with dark rings and paler inner areas), with weak lateral incisions. Interscutal membrane not sclerotised. 17 pairs of setae on the dorsal shield: 6D, 2M, 9L; all setae thick, covered with "wax" and placed on tubercles; elongate whip-like or minute setae absent. Two pairs of sublateral setae (S_1 , S_2). Sternal shield carries 3 pairs of setae. Ventrianal shield vase-shaped, with 3 pairs of preanal setae. Macrosetae on hind legs barely differentiated; thickened setae covered with wax are present on all legs. Chelicerae of normal size; *pilus dentilis* medially located (not basal).

This new genus belongs to the subfamily Amblyseiinae Muma (1961). It differs from the other genera of the subfamily by possessing setae covered with "wax." *Phytocerus* differs from *Amblyseius* Berlese by having "wax plates" on the dorsal

shield and by the lack of well developed and distinguished macrosetae on the hind leg. *Phytocerus* also resembles *Pamiroseius* Wainstein (1973), but in the latter the sternal shield carries 2 pairs of setae and the ventrianal shield has 2 pairs of preanal setae.

Type species: *Phytocerus desertorum* n. sp.

Phytocerus desertorum n. sp. (Figs. 1-5)

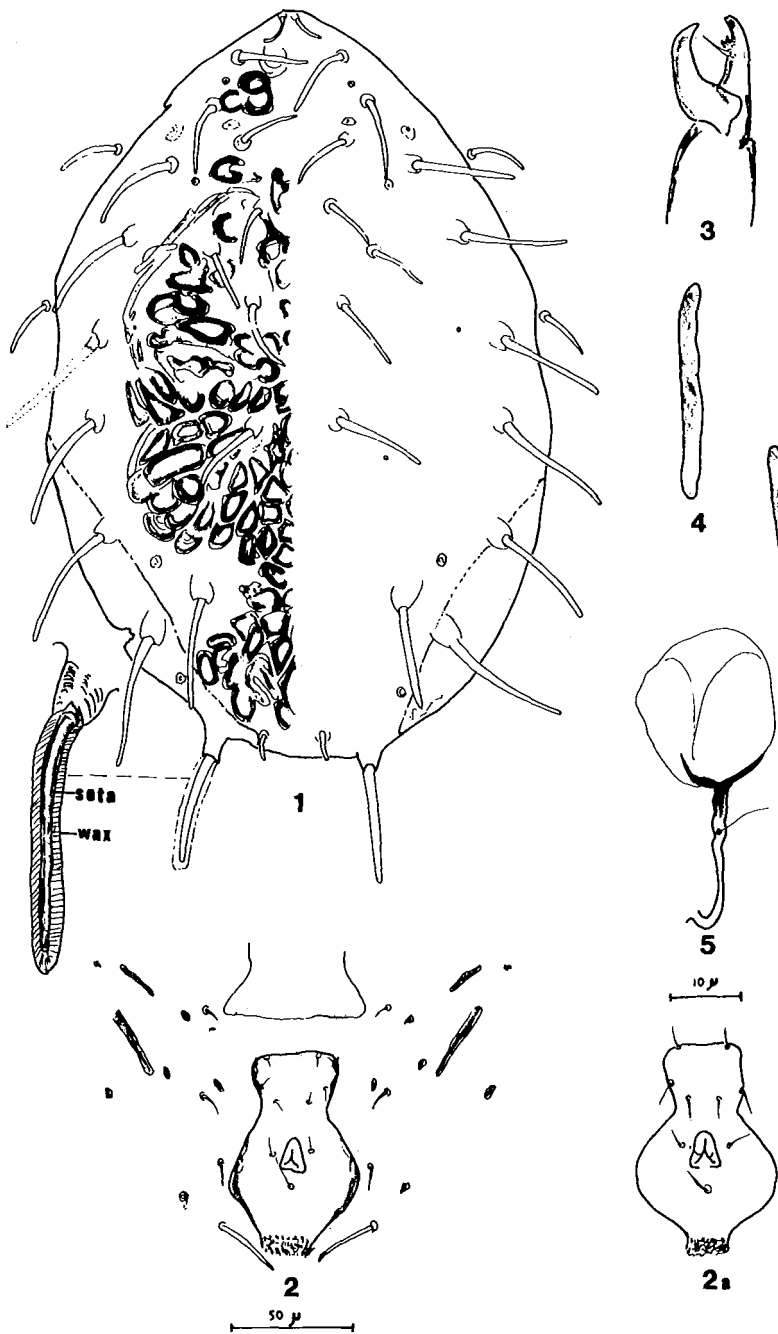
Female: Dorsal shield (Fig. 1) strongly sclerotised; caudal to setae M_1 covered with many "wax plates" (with dark chitinised rings and paler inner areas); with weak lateral incisions. Dorsal shield carries 17 pairs of setae; 6D, 2M, 9L; all setae are thick, covered with "wax," of moderate length, and situated on tubercles. Four pairs of solenostomes are distributed as follows on the dorsal shield: between L_1-L_2 , between L_3-D_3 , between M_2-L_7 , between L_8-L_9 . A few pairs of distinguishable poroides are marked in Fig. 1.

Sternal shield smooth, bearing three pairs of setae; setae v_4 are inserted on metasternal platelets.

Genital shield chitinised, smooth; its anterior margin rounded; its posterior margin almost straight, much wider than the width of the shield across the setae and than the anterior margin of the ventrianal shield; lateral margins of the shield constricted anterior and caudal to setae v_5 ; V-line prominent; two large projections on the anterior part of the shield are very prominent in the holotype and in few paratypes. Ventrianal shield (Figs. 2, 2a) smooth, vase-shaped, broad at the post-anal level; solenostomes (ian pores) absent; it carries three pairs of preanal setae; ratio of length/width = 1.40-1.94; $rA=1.40-2.0$. Three pairs of setae, besides VL_1 , surrounding the ventrianal shield; six pairs of poroides being situated on the ventral interscutal membrane. Primary metapodal plates (Fig. 4) elongate bacillus-like; secondary ones (Fig. 4) similar to the primary plates, but much shorter. Apex of peritreme reaches D_1 .

In the spermatheca (Fig. 5) the cervix shallow; atrium not adjacent to the cervix; major duct thick; minor duct discernible.

In the chelicerae (fig. 3) the fixed digit bears one bifid tooth and a medially located *pilus dentilis*; the movable digit smooth.



Figs. 1-5. *Phytocerus desertorum* n. sp.
 1- dorsal shield; 2, 2a- ventrianal shield, posterior part of the genital shield and metapodal plates; 3- chelicera; 4- metapodal plates; 5- spermatheca.

Macrosetae on hind legs scarcely differentiated; weakly blunt and thick setae covered with "wax" are distributed as follows: 2-4 on genu (15-20 μ); 2-3 on tibia (15-22 μ); 1-2 on basitarsus (20-23 μ); one on distitarsus (18-20 μ). Additional modified setae are present also on other legs. Leg setal formulae - genu II $2\frac{2,2}{0,0}1$ or $1\frac{2,2}{1,0}1$; genu III $1\frac{2,2}{1}1$; tibia II and tibia III $1\frac{1,2}{1,1}1$.

Measurements (in microns): $D_8 = 325(312-340)$; $L_{va} = 96(91-103)$; $l_{va} = 62(53-66)$; $D_1 = 19(18-21)$; $D_2 = 27(21-33)$; $D_3 = 26(23-30)$; $D_4 = 33(27-35)$; $D_5 = 38(33-43)$; $D_6 = 15(13-20)$; $L_1, L_2 = 37(35-40)$; $L_3 = 42(35-50)$; $L_4, L_5 = 47(42-53)$; $L_6 = 52(45-58)$; $L_7 = 53(45-61)$; $L_8 = 55(46-66)$; $L_9 = 52(45-66)$; $M_1 = 27(25-30)$; $M_2 = 50(45-55)$; $S_1 = 27(25-30)$; $S_2, VL_1 = 19(18-20)$.

MATERIAL EXAMINED: Female holotype (No. 2420), Israel, 'En Gedi, on *Acacia raddiana*, Feb. 11-18, 1971; four female paratypes same data as holotype. Eight female paratypes, same host and locality as holotype, collected Jan. 18-28, 1972.

Amblyseius swirskii Athias-Henriot, 1962

TYPE LOCALITY AND HABITAT: Holotype female and four paratype females on *Prunus amygdalus*, at Bet Dagan (Israel), Sept. 1961 (Athias-Henriot, 1962). Nine males on *Citrus* spp., at Gan Efrayim (Israel), Aug. 1962 (Porath and Swirski, 1965).

LOCATION OF TYPES: 1) LAEPP (Athias-Henriot, 1962); 2) Mme. Athias-Henriot's Collection.

RECORDS: On *Bambusa* sp. (leaves): Yas'ur, Oct. 8, 1968, 21 females, 11 males and 18 nymphs. On *Carya pecan* (leaves): Sede Warburg. Dec. 6, 1975, 4 females, one nymph. On *Centaurea* sp.: Yad Mordekhay, April 1, 1969, one female. On undet. Chenopodiaceae: Wadi Poleg, Feb. 10, 1970, one female. On *Citrus limon*: Sedot Yam, Oct. - Dec. 1966, females, males and nymphs, numerous (A. Rubin). Matta', Dec. 2, 1969, females.

Shahariyya, March 23, 1970, 14 females, 6 males, 4 nymphs (S. Kamburov). On *Citrus paradisi*: Bet Dagan, May 8, 1968, 2 females (M. Sternlicht). Rishon Le Zion, Aug. 25, 1969, one female, one male. Magen, Aug. 26, 1975, 8 females (M. Berlinger). On *Citrus reticulata* (Clementine): Kefar Vitkin, May 28, 1969, 8 females. Yedideya, May 20, 1969, 9 females, 3 males. On *Citrus sinensis* (Valencia orange): Besor "B", March 23, 1970, 9 females, 2 males (S. Kamburov). On *Citrus* spp.: Gesher Haziv, Nov. 17, 1970, one female (A. Porath). Nir Gallim, Aug. 14, 1973 females. On *Convolvulus* sp.: Newe Ya'ar, May 13, 1971, one nymph; May 30, 1972, 15 females, 2 males (N. Plaut). Karmon, April 1, 1969, 16 females, 5 males (M. Wysoki). On *Cynodon dactylon*: Ayanot, May 20, 1970, 8 females, 6 males. On *Diospyros virginiana* (leaves): Miqwe Yisrael, Aug. 2, 1968, 3 females, one male. On *Eucalyptus* sp.: Beeri, June 28, 1969, 2 females, one male. On *Gleditschia sinensis*: Miqwe Yisrael, Aug. 22, 1969, 2 females, 2 males. On undet. Gramineae: Ashqelon. Oct. 27, 1971 (S. Ragusa). Gilat, Oct. 27, 1969, one female, one male. On *Inula* sp.: Wadi Poleg, Jan. 1, 1970, 2 females. On undet. Labiatae: Yas'ur, Oct. 8, 1968, one female. On *Lonicera japonica*: Bet Dagan, Aug. 21, 1969, 8 females, one male. On *Mentha* sp.: Dabbura (GH), Nov. 11, 1969, 4 females, 2 males. On *Nerium oleander*: Bet Dagan, Sept. 1, 1969, 2 females. On *Persea americana* (leaves): Rosh Haniqra, Sept. 6, 1971, (S. Ragusa). Regba Sept. 19, 1970, 2 females (on a fruit, within a spider's web) (M. Wysoki). Sedot Yam, Oct. 21, 1974, one female. Hadera, Sept. 12, 1974, 13 females, 6 males. Kefar Haroe, July 29, 1974, 3 females. Hibbat Tsion, Nov. 8, 1974, one female. On *Polygonum equisetiforme*: Tsur Moshe, Nov. 4, 1969, females. On *Pyracantha crenato-serrata*: Miqwe Yisrael, Aug. 22, 1969, 5 females. On *Pyrus malus*: Allonim, Sept. 9, 1977, 2 females (F. Mansour). Newe Ya'ar, Aug. - Sept., 1968, females, males and nymphs; Feb., Sept. - Oct., 1972, females, males, nymphs (N. Plaut); June 17, 1976, 31 females, one male; Aug. 2, 1977, 2 females (F. Mansour). Bet Dagan, Oct. 21, 1971, females, males, nymphs (S. Ragusa); Dec. 29, 1975, females, males, nymphs, numerous (M. Wysoki). On *Quercus ithaburensis*: Tel Aviv (Botanical Gardens of Tel Aviv University), Aug. 5, 1969, 2 females, one male. On *Quercus* sp.: Matta', Nov. 20, 1969, 2 males. On *Sinapis* sp.: Bet Dagan, Feb. 3, 1970, females. On *Solanum* sp.: Wadi Poleg, Jan. 1, 1970, one female, 2 males. Matta', Nov. 26, 1969, 3 females, 2 males. On *Thymelaea* sp.: Wadi Poleg, Feb. 10, 1970, 6 females. On *Viola* sp.: Newe Ya'ar, Sept. 1970, 4 females, 2 males; Oct. 1970,

3 females. Qiryat Tiv'on, May 15, 1973, 15 fem., one male, 3 nym. (N. Plaut). In dust (house): Nes Ziyona, June 2, 1976, one female (Bruria Feldman-Muhsam).

Amblyseius cucumeris (Oudemans, 1930)

TYPE LOCALITY AND HABITAT: On *Cucumis melo*, Buré, France (Chant, 1959).

LOCATION OF TYPES: RNHL (Chant, 1959).

RECORDS: On *Adiantum capillus-veneris* and *Cyperus rotundus*: Tel Aviv (Botanical Gardens of Tel Aviv University), March 26, 1968, 3 females. On *Erigeron* sp.: Matta' (YH), Dec. 2, 1969, 2 females. On *Inula crithmoides*: 'Ein Fashkha (near the Dead Sea), April 21, 1971, breedings. 3 males.

Amblyseius engaddensis Amitai and Swirski, 1970

TYPE LOCALITY AND HABITAT: On Gramineae, at 'En Gedi (near the Dead Sea), in Dec. 1967 (Amitai and Swirski, 1970).

LOCATION OF TYPES: AROI (Amitai and Swirski, 1970).

RECORDS: On Gramineae: 'En Gedi, April 20, 1972, 3 females, 2 males, 2 nymphs.

Amblyseius barkeri (Hughes, 1948)

TYPE LOCALITY AND HABITAT: Germinating barley plumules, London Docks, England (Hughes, 1948).

LOCATION OF TYPES: BM(?) (Chant, 1959).

RECORDS: On *Adiantum capillus-veneris*: 'En Gedi (near the Dead Sea), June 17, 1969, one female. On *Citrus* sp.: Kefar Haroe (Sh.). Oct. 5, 1971, females (H. van Emden). On *Cynodon dactylon*: 'Ayanot (She.), May 20, 1970, 8 females. Beerli (N), June 28, 1969, 6 females, 3 males. On *Cyperus rotundus*: Beerli, June 4, 1969, 3 females. Kissufim (N), June 28, 1969, 3 females. Fara (southern JV), Jan. 27, 1971, one female. On

Gossypium sp.: Newe Ya'ar, Sept. 1970, 2 females, one nymph; Oct. 1970, one female; Aug. 1971, one female (N. Plaut). On undet. Gramineae: Kefar Saba (Sh.), Nov. 10, 1970, females. Bet Dagan, May 5, 1971, one female. Nahshon (She.), June 10, 1969. Ashqelon, May 26, 1971, females. 'Ein Fashkha (near the Dead Sea), July 15, 1970, 8 females. On *Lippia nodiflora*: 'Ein Tureiba (near the Dead Sea), Sept. 4, 1973, 11 females, 3 males. On *Quercus* sp.: Matta' (YH), Nov. 20, 1969, one female. On *Viola* sp.: Newe Ya'ar, Sept. 1970, 2 females, one nymph; Oct. 1970, one female; Aug. 1971, one female. Qiryat Tiv'on, May 15, 1973, one fem. (N. Plaut). In house dust: Jerusalem, Oct. 29, 1974, females. Nes Ziyona, May 29, 1974, females (Bruria Feldman-Muhsam).

Amblyseius messor (Wainstein, 1960)

TYPE LOCALITY AND HABITAT: Gramineae, Georgia (U.S.S.R.), in May, June 1953, 1955, females (Wainstein, 1960). Males were found in Israel on *Solanum nigrum*, at Nahal Poleg (Sh.), in Feb., 1970; on *Artemisia monosperma*, at Ashqelon, in March 1970 (Amitai and Wysoki, 1974).

LOCATION OF TYPES: IBIWR (Wainstein, 1960).

RECORDS: On *Artemisia monosperma*: Ashqelon, March 19, 1970, one female, one male. On *Citrus* sp.: Kefar Bilu (She.), July 6, 1966, one female. On Gramineae: Ashqelon, Jan. 11, 1971, one female. On *Oxalis* sp. and *Convolvulus* sp.: Ashqelon, May 6, 1971, 3 females, 8 males, 2 nymphs. On *Polygonum* sp.: Hama'apil (Sh.), May 29, 1970, one female. On *Tamarix* sp. (litter): Wadi Besor (N), March 23, 1967, one female.

Euseius rubini (Swirski and Amitai, 1961)

TYPE LOCALITY AND HABITAT: Females and males on *Ricinus communis*, Azor, May 1960, Aug. 1961; on *Ipomoea* sp., Tel Aviv, Aug. 1960; on *Pyrus malus*, Bet Dagan, Aug. 1961 (Swirski and Amitai, 1961).

LOCATION OF TYPES: AROI; deposited also in MHNP.

RECORDS: On *Acacia* sp.: Nizzanim (She.) Aug. 22, 1969, one female. On *Bambusa* sp.: Miqwe Yisrael (She.), Aug. 28, 1968. On *Carya pecan*: 'Akko, Oct. 8, 1968, 4 females, 2 males, one larva. On *Ceratonia siliqua* (leaves): Bet 'Arif (near Lod), July 14, 1975, 2 females, 3 males, 4 nymphs. On *Citrus limon* (leaves): Sedot Yam (Sh.), Nov. 21, 1966, 2 females; Dec. 15, 1966, 6 females, 2 males (A. Rubin). On *Citrus* sp. (leaves): Zur Moshe (Sh.), Nov. 4, 1969, 3 females. On *Diospyros virginiana* (leaf): Miqwe Yisrael, Aug. 2, 1968, one female. On *Gleditschia sinensis* (leaves): Miqwe Yisrael, Aug. 22, 1969, one female, 2 males. On undet. Gramineae: Ayyelet Hashahar (G), July 3, 1969, 6 females, 3 males. On *Hibiscus* sp.: Fara (southern JV), Jan. 27, 1971. On *Jacaranda mimisifolia*: Miqwe Yisrael, July 11, 1968, 4 females. On *Lippia nodiflora*: 'Ein Tureiba, (near the Dead Sea), Sept. 14, 1973, one female. On *Lonicera japonica* (leaf): Bet Dagan, Aug. 21, 1969, one female. On *Morus* sp.: Beit Jimal (JH), Nov. 25, 1971. On *Persea americana* (leaves): Rosh Haniqra, Yehi'am, Regba (WG), Sept. 1971, females, males, nymphs, numerous (S. Ragusa and H. van Emden). Kabri (WG), May 13, 1970, 19 females, 3 males, 3 nymphs. Regba, May 13, 1970, 18 females, 3 males. Sedot Yam (Sh.), Oct. 21, 1974, 4 females, 2 nymphs. Hadera, Sept. 12, 1974, one female. Hibbat Ziyon and Kefar Haroe (Sh.), July 29, 1974, 2 females, one male, 3 nymphs; Oct. 21, 1974, 4 females, 2 nymphs; Nov. 11, 1974, 7 females, 4 nymphs. Giv'at Hayyim, (Sh.), July 20, 1974, 9 females. Kefar Hayarok (near Tel Aviv), Aug. 28, 1974, one female. Nezer Sereni (She.), Oct. 31, 1971 (S. Ragusa); June 30, 1974, 21 females. Gedera, Nov. 11, 1974, 11 females, 2 males, 2 nymphs. 'En Ayyala (Coastal Plain), July 29, 1974, 2 females, one male, one nymph. On *Phillyrea latifolia*: Elon (WG), Oct. 9, 1968, one male. Montfort (WG), Sept. 10, 1970, one female, one male. On *Pistacia atlantica* (leaves): Elon, Oct. 8, 1968, 9 females, 8 males. On *Platanus orientalis* (leaf): Tel Aviv (Botanical Gardens of Tel-Aviv University), Aug. 5, 1969, one female. On *Punica granatum* (leaves): 'En Hamifraz (WG), Oct. 9, 1968, 23 females, 9 males. On *Ricinus communis* (leaves): Sedot Yam (Sh.), Nov. 23, 1967, 2 females, one male (A. Rubin). On *Rosa* sp. (leaves): Gilat (N), Oct. 27, 1969, females. On *Salvadora persica* (leaves): 'En Gedi (by the Dead Sea), Dec. 12, 1968, 19 females, 4 males, 2 nymphs. On *Schinus terebinthifolius* (leaves): Miqwe Yisrael (She.), June 19, 1968, females, males and nymphs. On *Spiraea vanhouttei* (leaves): Miqwe Yisrael, June 23, 1968, females. On *Viola* sp.: Newe Ya'ar, Oct. 1970, 3 nymphs (N. Plaut). On *Zizyphus spinachristi* (leaves): Jericho, July 15, 1970, 2 females. Wadi 'Arugot, Feb. 24, 1974.

Euseius eitanae (Swirski and Amitai, 1965)

TYPE LOCALITY AND HABITAT: 'En Gedi (near the Dead Sea), in March 1964, on *Solanum* sp., *Salvadora persica* and *Calotropis procera* (Swirski and Amitai, 1965).

LOCATION OF TYPES: AROI (Swirski and Amitai, 1965); deposited also in IAO.

RECORDS: On *Acacia* sp.: 'En Gedi, Dec. 21, 1967, 3 females. On *Acacia raddiana*: 'En Gedi, Feb. 11, 1972, nymph; Feb. 18, 1971, 6 females, one male, one nymph; Jan. 18, 27, 1972, females. On *Atriplex* sp.: 'En Gedi, Feb. 18, 1971, one male. On *Inula crithmoides*: 'Ein Fashkha (near the Dead Sea), April 21, 1971, 4 females.

Kampimodromus judaicus (Swirski and Amitai, 1961)

TYPE LOCALITY AND HABITAT: Females on *Salvia* sp., at 'En Hemed (Aqua Bella) (JH), in April, 1961 (Swirski and Amitai, 1961). Males on *Ballota undulata*, at Zahariya (JH), in April 1970 (Amitai and Wysoki, 1974).

LOCATION OF TYPES: AROI (Swirski and Amitai, 1961).

RECORDS: On *Ballota undulata*: 'Agur (She.), April 17, 1969; April 2, 1970, females, males and nymphs (M. Wysoki). On *Salvia* sp.: Kefar Uriya (She.), Oct. 17, 1968, females. On *Sideritis* sp.: 'En Hemed (Aqua Bella) (JH), July 19, 1968, females. Mevasseret Yerushalayim (JH), Sept. 1, 1968, females.

Eharius chergui (Athias-Henriot, 1960)

TYPE LOCALITY AND HABITAT: On *Marrubium vulgare*, *Lycium europaeum* and *Ruta montana*, at Tilmouni (Sidi-Bel-Abbes, Algeria), in Oct. 1959 (Athias-Henriot, 1960).

LOCATION OF TYPES: LAEPP (Athias Henriot, 1960).

RECORDS: On *Salvia* sp.: Bet Guvrin (JH), March 20, 1966, one female (A. Rubin).

Iphiseius degenerans (Berlese, 1889)

TYPE LOCALITY AND HABITAT: Leaves and moss (Italy) (Chant, 1959).

LOCATION OF TYPES: BCF (Chant, 1959).

RECORDS: On *Citrus limon* (leaf): Sedot Yam (Sh.), Oct. 13, 1966, one female (A. Rubin). On *Citrus* spp. (leaves): Kefar Haroe (Sh.), Sept. 30, 1971 (coll. S. Ragusa); Oct. 5, 1971 (H. van Emden); Zur Moshe (Sh.), Nov. 4, 1969, 16 females and 7 males; Bet Dagan, Oct. 13, 1971 (H. van Emden). On undet. Gramineae in a citrus orchard: Ben Shemen (She.), June 22, 1969, 3 females. On *Hibiscus* sp.: Rishon Le Zion, Oct. 7, 1976, females. On *Maclura aurantiaca*: Miqwe Yisrael (She.), June 19, 1968, 2 females. On *Morus nigra* (leaves): Miqwe Yisrael, March 17, 1966, 2 females and one male. On *Musa sapientum*: Mazzuva (WG), Oct. 29, 1975, females, males, nymphs, numerous. On *Phillyrea latifolia*: 'En Hemed (Aqua Bella (JH), Aug. 1, 1968, females. Miqwe Yisrael, Aug. 2, 1968, 2 females. On *Ricinus communis* (leaves): Bet Dagan, Nov. 12, 1971, females, males, nymphs (H. van Emden). On *Solanum* sp. (leaves): Bet Dagan, Feb. 10, 1970, 3 females. On *Zea mays*: Bet Dagan, Oct. 3, 1971, 2 females (M. Wysoki).

Phytoseiulus persimilis Athias-Henriot, 1957

TYPE LOCALITY AND HABITAT: Females and males on roses in glasshouses, infested by *Tetranychus urticae* (L.), at Staoueli (Algeria) (Athias-Henriot, 1957).

LOCATION OF TYPES: MHNP (Athias-Henriot, 1957).

RECORDS: On *Adhatoda vasica* (leaves): Bet Dagan (glasshouse), Dec. 16, 1974, numerous, associated with *Tetranychus cinabarinus* (Boisd.). On *Beta vulgaris*: Newe Ya'ar, Sept. 18, 1973, 2 females (coll. N. Plaut). On *Convolvulus* sp.: Newe Ya'ar, May 13, 1971, 21 females, 16 males, 9 nymphs (coll. N. Plaut). On *Gossypium* sp. (leaves): Bet Dagan, Feb. 2, 1970, females, males, nymphs, numerous. On undet. Gramineae: Bet Dagan, May 5, 1971, one male. On *Polygonum* sp.: Hulata (near the Jordan River), July 3, 1969, females, males, nymphs, numerous. On *Prunus amygdalus* (leaves): Bet Dagan (glasshouse), Nov. 20, 1978, females, males, nymphs, associated with

Tetranychus cinnabarinus (Boisd.). On *Solanum* sp.: Wadi Poleg (Sh.), Feb. 10, 1970, 2 females. On *Viola* sp.: Newe Ya'ar, Sept. 1970, 2 females; Oct. 1970, one female; Aug. 1971, 19 females, 3 males, 5 nymphs; April 16, 1972, 13 females, 6 males, 4 nymphs; June 14, 1973, 18 females, 6 males, 13 nymphs (N. Plaut). Qiryat Tiv'on, April 18, 1973, 35 females, 3 males, 16 nymphs; May 15, 1973, 14 females, 5 males, 16 nymphs; Aug. 6, 1973, 2 males, one nymph (N. Plaut). On undet. plant: Miqwe Yisrael (She.), April 5, 1971 (H. van Emden).

Typhlodromus athiasae Porath and Swirski, 1965

TYPE LOCALITY AND HABITAT: Citrus, Rehovot, Jan. 1961, females and one male; one male allotype was collected on a grapefruit tree at Kefar Yehoshua' (Israel), in June 1963. Additional paratypes of both sexes were removed from various plants in different localities of Israel (Porath and Swirski, 1965).

LOCATION OF TYPES: AROI; also in IAO, MHNP and IBIWR.

RECORDS: On *Abellia grandiflora* and *Gardenia thunbergia*: Miqwe Yisrael, July 11, 1968, females. On *Acacia cultifrons*: Miqwe Yisrael, Aug. 22, 1969, 3 females, one nymph. On *Acer obtusifolium* (leaves): Bet Dagan, Oct. 24, 1969, 4 females. Montfort, April 9, 1970, 2 females. On *Apium nodiflorum*: Tel Aviv University, March 26, 1968, one female. On *Asparagus* spp.: Miqwe Yisrael, July-Aug. 1968, females and males. Muhraqa (Mt. Carmel), Sept. 24, 1969, 2 females. Nov. 11, 1969, 6 females, 2 nymphs. On *Atriplex* sp.: 'En Fashkha, April 14, 1970, females; May 12, 1970, one female, one male. Neot Hakikar, Feb. 11, 1971, 5 females, 2 males. 'En Gedi, Feb. 18, 1971, females. On *Bambusa* sp.: Miqwe Yisrael, Aug. 22, 1969, one female. On *Calycotome villosa*: Mt. Carmel, Jan. 22, 1970, one female. On *Ceratonia siliqua* (leaves): Bet Dagan, March 12, 1965, one female, one male. On undet. Chenopodiaceae: Wadi Poleg, Feb. 10, 1970, one female. On *Chloris gayana*: Ramle, Aug. 5, 1970, 3 females. On *Cistus* sp.: Montfort, April 9, 1970, 2 females. On *Citrus aurantium*: Bet Dagan, May 7, 1968, one female (M. Sternlicht). On *Citrus paradisi*: Kefar Szold, Oct. 11, 1972, females. On *Clematis* sp.: Netiv Halamed-hei, Nov. 20, 1969, 4 females. On *Convolvulus* sp.: Newe Ya'ar, June 21, 1973, one female; Aug. 15,

1973, one female. On *Conyza* sp.: El Hamma, April 24, 1975, females. On *Crataegus* sp.: Miqwe Yisrael, April 17, 1969, 2 females, one male. On *Cupressus sempervirens*: Metulla, May 5, 1975, one female, one nymph. 'En Hashelosh, June 28, 1969, 13 females, 10 males. Gan Shemuel, May 20, 1969, 18 females, 6 males. Sa'ad, April 1, 1969, 18 females, 6 nymphs. Beerli, June 4, 1969, 6 females, 4 males. Gilat, June 4, 1969, 8 females, 3 males. On *Cynodon dactylon*: Hama'pil, May 29, 1970, 8 females. Ashqelon, March 19, 1970, 4 females. On *Equisetum* sp.: Matta', Dec. 2, 1969, 8 females, one male. On *Erigeron* sp.: Matta', Dec. 2, 1969, 4 females. On undet. Gramineae: Montfort, April 9, 1970, 2 females. Kinneret, April 7, 1970, females. Zikhron Ya'aqov, May 20, 1973, one male. Modi'in, Feb. 17, 1970, one female. Netiv Halamed-hei, May 23, 1970, 4 females. On *Hibiscus* sp.: Jerusalem, April 19, 1970, females. On *Inula crithmoides*: Jericho, April 21, 1971, 2 females. On *Juncus* sp.: 'En Fashkha, Aug. 5, 1970, one female. On *Lonicera japonica*: Bet Dagan, Aug. 21, 1969, 6 females, 2 males. On *Majorana syriaca*: Bezet, April 23, 1970, 3 females, one male. On *Marrubium* sp.: Jerusalem, April 4, 1969, 3 females, one male. On *Mentha* sp.: Dabbura (GH); Nov. 11, 1969, 3 females, 2 males. On *Olea europaea*: Zikhron Ya'aqov, June 20, 1977, females, Bet 'Arif, July 14, 1975, 2 females. Matta', Aug. 5, 1970, one female. Ashqelon, March 19, 1970, 2 females. On *Passiflora* sp.: Hadera, May 29, 1970, 4 females, 2 males. On *Pennisetum purpureum*: Bustan Hagalil, June 16, 1975, females. On *Persea americana* (leaf): 'Ein Ila, July 29, 1974, one female. On *Phillyrea latifolia*, *Laurus nobilis* and *Styrax officinalis*: Miqwe Yisra'el, Aug. 2, 1968, females and males. On *Phoenix dactylifera*: Kinneret, April 7, 1970, 3 females, 3 nymphs. El Hamma, April 24, 1975, females. 'En Gedi, Dec. 12, 1968, 20 females, 11 males, 8 nymphs. On *Pinus canariensis*: Bustan Hagalil, June 16, 1975, females. On *Pinus* sp.: Mt. Carmel, Feb. 21, 1972, females (Tova Grinberg). Ilanot, May 1, 1966, females and males (J. Halperin). Zekharya, Sept. 6, 1969. Gilat, Oct. 27, 1969, females. On *Pistacia lentiscus*: Matta', Nov. 26, 1969, females and nymphs. 'En Hemed (Aqua Bella), July 19, 1968, females and males. 'Agur, April 15, 1969, 2 females, one male. On *Phillyrea latifolia*: Aqua Bella, July 19, 1968, females and males. On *Polygonum* sp.: Matta', Aug. 5, 1970, 2 females, one male, 4 nymphs. On *Poterium spinosum*: Matta', Dec. 2, 1969, females. On *Punica granatum* (leaves): Bustan Hagalil, June 16, 1975, females. On *Pyracantha crenato-serrata*: Miqwe Yisra'el, Aug. 22, 1969, one female. On *Pyrus malus* (leaves): Yagur, Aug. 25, 1976, females and males. Allonim, Sept. 9, 1977, 5 females, 2 males (F. Mansour).

Newe Ya'ar, July - Sept. 1968, females and males; Oct. 1972, one nymph; June 1976, 12 females, one male (N. Plaut); Aug. 26, 1977, 21 females, 7 males (F. Mansour). Ramat Dawid, June 1976, 22 females, 2 males (F. Mansour). Matta', May 1970, females. On *Pyrus syriaca*, *Platanus orientalis* and *Quercus ithaburensis*: Tel Aviv (Botanical Gardens of Tel-Aviv University), Aug. 5, 1969, 8 females, 4 males and 3 nymphs. On *Quercus calliprinos*: Mt. Carmel, July 27, 1975, 2 females. Wadi Poleg, Feb. 10, 1970, one female. Bet Meir, April 2, 1969, 3 females, 2 nymphs. On *Quercus* sp.: Mt. Carmel, Feb. 21, 1972, one female (Tova Grinberg). Matta', Nov. 20, 1969, females; July 21, 1970, 11 females (on cups of fruits). On *Quercus calliprinos*, *Crataegus azarolus* and *Cupressus sempervirens*: 'Agur, Nov. 25, 1968, females, males and nymphs. On *Rubia tenuifolia*: Matta', May, 1970, 2 females. On *Ruscus aculeatus*: Muhraqa (Mt. Carmel). Sept. 24, 1969, females. On *Salix* sp.: Ramat Hashofet, July 21, 1975, one female. On *Salvia* sp.: Elon, April 23, 1970. On *Spiraea vanhouttei* (leaves): Miqwe Yisrael, June 23, 1968, 5 females. On *Thymelaea* sp.: Wadi Poleg, Feb. 10, 1970, females. On *Viburnum suspensum*: Midreshet Ruppin, Jan. 20, 1975, females. On *Viola* sp.: Newe Ya'ar, Sept. 9, 1973, one male. Qiryat Tiv'on, Aug. 8, 1973, 6 females, 3 nymphs (N. Plaut). In dust (house): Jerusalem, April 24, 1975, one female (Bruria Feldman-Muhsam).

Typhlodromus phialatus Athias-Henriot, 1960

TYPE LOCALITY AND HABITAT: Algeria, in Oct. 1959, on: *Calamintha clinopodium*, *C. heterotricha*, *Pteris aquilina*, *Cistus salviifolius*, *Lonicera implexa*, *Quercus suber* and *Arbutus unedo*.

LOCATION OF TYPES: LAEPP (Athias-Henriot, 1960).

RECORDS: On *Tamarix* sp.: El Hamma (JV), Feb. 20, 1972, one female.

Anthoseius cryptus (Athias-Henriot, 1960)

TYPE LOCALITY AND HABITAT: Females and males on *Crataegus oxyacantha* subsp. *monogyna*, Dec. 1956, at Algiers (Algeria) (Athias-Henriot, 1960).

LOCATION OF TYPES: LAEPP (Athias-Henriot, 1960).

RECORDS: On *Abbelia grandiflora*: Miqwe Yisrael (She.), July 11, 1968, one female. On *Araucaria bidwilli*: Miqwe Yisrael, July 4, 1968, one female; Aug. 28, 1968, 4 females. On *Cedrus libani* and *Libocedrus decurrens*: Miqwe Yisrael, July 4, 1968, 15 females, 3 males, 2 nymphs. On *Citrus* sp. (on lichens): 'Ayanot (She.), May 31, 1970. On *Cynodon dactylon* and *Prunus amygdalus*: Ashqelon, March 19, 1970, two females. On *Morus* sp.: Rosh Haniqra (WG), Nov. 20, 1966, one female. On *Quercus calliprinos* (leaves): Mt. Carmel, Sept. 24, 1969, 5 females, one male (on lichens); July 21, 1975, one female. On *Smilax aspera*: Even Yehuda (Sh.), May 28, 1969, one female.

Anthoseius porathi (Swirski and Amitai, 1967)

TYPE LOCALITY AND HABITAT: *Quercus calliprinos*, Meron (Galil Mt., Israel), in Oct., 1964 (Swirski and Amitai, 1967).

LOCATION OF TYPES: AROI (Swirski and Amitai, 1967); deposited also in MHNP and IAO.

RECORDS: On *Olea europaea*: Ramallah (JH), July 7, 21, 1975. On *Phillyrea latifolia*: Aqua Bella (JH), Aug. 1, 1968, 2 females. On *Pyrus malus*: Newe Ya'ar, Aug. 5, 1968, 2 nymphs (N. Plaut). On *Quercus calliprinos*: Mt. Hermon (1500 m above sea level), June 24, 1971. On *Quercus ithaburensis* (leaves and inflorescence): Mt. Carmel, April 11, 1967, females. Gan Shemuel (Sh.), May 20, 1969, 13 females, 9 males. On *Quercus* sp.: Qiryat Tiv'on, Nov. 2, 1967. Aqua Bella, March 25, 1969, 12 females, 4 males. On *Styrax officinalis* and *Crataegus* sp.: Miqwe Yisrael (She.), Aug. 2, 1968, one female, nymphs. On *Viola* sp. (under *Quercus* trees): Qiryat Tiv'on, June 21, 1973, one female, one male (N. Plaut).

Anthoseius recki (Wainstein, 1958)

TYPE LOCALITY AND HABITAT: *Salvia nemorosa*, Tbilisi (Georgia, U.S.S.R.), June 1955 (Wainstein, 1958).

LOCATION OF TYPES: IBIWR.

RECORDS: On *Alcea setosa*: Allonim (YV), Oct. 23, 1969, 2 females, 2 males; Jan. 19, 1970, one female (Tova Grinberg). On *Alkanna tinctoria*: Azur (She.), Apr. 2, 1962, 2 females. On *Althaea rosea*: Bet Dagan, July 11, 1960, 4 females. On *Anchusa aggregata*: Bet Dagan, April 6, 1961, one female. On *Ballota undulata*: 'En Mor (N), March 16, 1970, 2 females, one male, 2 nymphs (Coll. Tova Grinberg). On *Centaurea iberica*: Bet Dagan, Feb. 11, 1962, 3 females. On *Ceratonia siliqua* (leaves): Qiryat Haroshet (YV), June 14, 1961, 3 females. Bet Dagan, March 12, 1965, one female. On *Cistus* sp.: Mt. Carmel, Dec. 15, 1969, one female (Tova Grinberg). On *Citrus sinensis* (Shamouti, leaves): Yavne (She.), Sept. 1, 1959, 2 males. On *Citrus* sp.: Western Galilee, July 24, 1960, one female (B. Shifrin). On *Cynoglossum* sp.: Qiryat Tiv'on, Jan. 19, 1970, 8 females (Tova Grinberg). On *Echium angustifolium*: Bet Dagan, April 21, 1961, 3 females. On *Echium* spp.: Kefar Masaryk (WG), Dec. 26, 1966, 16 females (N. Dorzia). Bet Dagan, Feb. 7, 1962, 4 females; June 25-27, 1963, 7 females, one male; Sept. 2, 1964, 5 females, 10 males, 2 nymphs; Oct. 14, 1964, 4 females, 4 males; March 16, 1965, 3 females. Tirosh (She.), March 3, 1965, 42 females, 4 males. Ashqelon, Jan. 3, 1964, 2 females. On *Erigeron* sp., *Convolvulus* sp. and *Solanum villosum*: Wadi Poleg (Sh.), Feb. 10, 1970, 5 females (Tova Grinberg). On *Eriobotrya japonica* (leaves): Bet Dagan, May 28, 1962, 4 females, one male. On *Hypericum* sp.: 'Ajur (She.), Sept. 16, 1969, 2 females (Tova Grinberg). On *Inula viscosa*: Meron (G), Oct. 9, 1964, one female. Yagur (near Haifa), June 14, 1961, 3 females. On *Lonicera japonica*: Bet Dagan, July 31, 1960, 2 females. On *Majorana syriaca*: Allonim (YV), Oct. 23, 1969, one female, one male (Tova Grinberg). Hartuv, March. 12, 1965, 4 females. Zova (JH), March 26, 1972, one female. On *Malvella sherardiana*: Bet Dagan, Aug. 9, 1961, one male. On *Micromeria nervosa* and *Oenothera drummondii*: Tel Aviv (Botanical Gardens of Tel-Aviv University), May 10, 1962, 9 females, 4 males. On *Phlomis viscosa*: Qastel (JH), May 22, 1964, 4 females. On *Poterium spinosum*: Wadi 'Amud (G), Sept. 14, 1970, 3 females, one male. Matta' (JH), Dec. 2, 1969, 3 females (Tova Grinberg). On *Pyrus malus* (leaf): Allonim, June 19, 1963, one female. Newe Ya'ar, Aug. 14, 1965, 9 females, 3 males (N. Plaut). Bet Dagan, May 24, 1962, 3 females. On *Quercus ithaburensis* (leaf): Bet Dagan, Sept. 21, 1961, one female. On *Rubus sanctus*: Bet Dagan, May-July, 1970, 7 females. On *Salvia* sp.: Mt. Carmel, Jan. 14,

1970, one female (Tova Grinberg). Bet Dagan, Feb. 12, 1961, 2 females. On *Scolymus maculatus*: 'Agur, April 26, 1961, 4 females. On *Solanum melongena* (leaves, lower side): Bet Dagan, Sept. 13, 14, 1964, 12 females, 7 males; Feb. 23, 24, 1965, 16 females; March 3, 1965, one female; March 8, 1965, 2 females. Rishon Le Zion, March 15, 1965, 5 females, 2 males. On *Solanum villosum*: Bet Dagan, Aug. 8, 1961, 2 females, one male. On *Teucrium polium* and *Varthemia iphioides*: Beit Jimal (JH), May 16, 1964, 2 females. On Ulmaceae: Tel Aviv (Botanical Gardens of Tel-Aviv University): May 15, 1962, 2 females. On *Verbascum sinuatum*: Bet Dagan, Oct. 30, 1961, 2 females; Feb. 9, 1962, 2 females. On *Viola* sp. (leaves): Newe Ya'ar, May 11, 1965, one female (N. Plaut).

Anthoseius hierochunticus (Amitai and Swirski, 1968)

TYPE LOCALITY AND HABITAT: *Citrus* sp., at Jericho, in July 1967 (Amitai and Swirski, 1968).

LOCATION OF TYPES: AROI.

RECORDS: On *Salvadora persica*: 'En Gedi (near the Dead Sea), Sept. 4, 1973, 4 females, one male.

Anthoseius sternlichti (Swirski and Amitai, 1968)

TYPE LOCALITY AND HABITAT: Holotype female and paratype females on *Quercus ithaburensis*, Hagoshrim (HV), in April 1967; allotype male and additional paratype females on *Quercus calliprinos* and *Q. ithaburensis* in different localities of Israel.

LOCATION OF TYPES: AROI.

RECORDS: On *Quercus ithaburensis*: Banyyas (GH), Feb. 15, 1968, females, males, nymphs. Gan Shemuel (Sh.), May 20, 1969, 15 females, 7 males. Tel Aviv (Botanical Gardens of Tel-Aviv University), Aug. 5, 6, 1969, 2 females. On *Quercus* sp. (cups of the fruit): Allonim (YV), Oct. 27, 1966, females. Qiryat Tiv'on, Nov. 2, 1967. On *Viola* sp.: Qiryat Tiv'on, July 10, 1973, one male (N. Plaut).

Clavidromus transvaalensis (Nesbitt, 1951)

TYPE LOCALITY AND HABITAT. On ground peanuts, Nylstrom, Transvaal (South Africa), in Feb. 1947. A paratype female was found on a rat (*Rattus* sp.), at Pinellas Park, Florida (U.S.A.), on Dec. 17, 1947 (Nesbitt, 1951).

LOCATION OF TYPES: CNC (Nesbitt, 1951).

RECORDS: On *Asparagus* sp.: Miqwe Yisrael (near Tel-Aviv, July 11, 1968, females. On *Atriplex* sp.: 'En Fashkha (near the Dead Sea), May 12, 1970, a nymph. On *Citrus* sp. (litter under tree): Bet Dagan, Sept. 19, 1966, one female. On *Inula crithmoides*: 'En Fashkha, May 12, 1970. In manure heap of a donkey: Qiryat Tiv'on, June 1, 1962, 2 females (M. Costa). In chocolate: Ilanot (Sh.), May, 1, 1966, females (J. Halperin).

Seiulus amaliae Ragusa and Swirski, 1976

TYPE LOCALITY AND HABITAT. All the type specimens were collected on *Citrus limon*. Holotype and paratype females at Bagheria (Sicily), July 1972. Other paratype females found at Bagheria and at Palermo. A male was found on Corfu Island (Greece) (Ragusa and Swirski, 1976).

LOCATION OF TYPES: IEAP and AROI (Ragusa and Swirski, 1976).

RECORDS: On *Morus* sp. (leaves): Rosh Haniqra (WG), Nov. 20, 1966, females; Dec. 28, 1966, females.

NOTE: This mite was recorded in Israel under *Typhlodromus talbii* Athias Henriot on *Citrus* spp. (Porath and Swirski, 1965) and on other plants (Tova Grinberg, i.l.).

Seiulus isotrichus Athias-Henriot, 1958

TYPE LOCALITY AND HABITAT: On *Inula viscosa*, at Rasauta (Algeria), Oct. 1956 (Athias-Henriot, 1958).

LOCATION OF TYPES: MHNP (Athias-Henriot, 1958).

RECORDS: On *Inula viscosa*: Bet Oren (MC), Sept. 14, 1968. Yas'ur (WG), Oct. 8, 1968, one female. On *Sideritis* sp.: Aqua Bella (JH), Sept. 1, 1968.

Phytoseius finitimus Ribaga, 1904

TYPE LOCALITY AND HABITAT: *Buddleia madagascariensis*, Portici (Italy) (Denmark, 1966).

LOCATION OF TYPES: Female was in Ribaga's collection, but was apparently lost (Denmark, 1966).

1970, one female (Tova Grinberg). Bet Dagan, Feb. 12, 1961, 2 females. On *Scolymus maculatus*: 'Agur, April 26, 1961, 4 females. On *Solanum melongena* (leaves, lower side): Bet Dagan, Sept. 13, 14, 1964, 12 females, 7 males; Feb. 23, 24, 1965, 16 females; March 3, 1965, one female; March 8, 1965, 2 females. Rishon Le Zion, March 15, 1965, 5 females, 2 males. On *Solanum villosum*: Bet Dagan, Aug. 8, 1961, 2 females, one male. On *Teucrium polium* and *Varthemia iphioides*: Beit Jimal (JH), May 16, 1964, 2 females. On Ulmaceae: Tel Aviv (Botanical Gardens of Tel-Aviv University): May 15, 1962, 2 females. On *Verbascum sinuatum*: Bet Dagan, Oct. 30, 1961, 2 females; Feb. 9, 1962, 2 females. On *Viola* sp. (leaves): Newe Ya'ar, May 11, 1965, one female (N. Plaut).

Anthoseius hierochunticus (Amitai and Swirski, 1968)

TYPE LOCALITY AND HABITAT: *Citrus* sp., at Jericho, in July 1967 (Amitai and Swirski, 1968).

LOCATION OF TYPES: AROI.

RECORDS: On *Salvadora persica*: 'En Gedi (near the Dead Sea), Sept. 4, 1973, 4 females, one male.

Anthoseius sternlichti (Swirski and Amitai, 1968)

TYPE LOCALITY AND HABITAT: Holotype female and paratype females on *Quercus ithaburensis*, Hagoshrim (HV), in April 1967; allotype male and additional paratype females on *Quercus calliprinos* and *Q. ithaburensis* in different localities of Israel.

LOCATION OF TYPES: AROI.

RECORDS: On *Quercus ithaburensis*: Banyyas (GH), Feb. 15, 1968, females, males, nymphs. Gan Shemuel (Sh.), May 20, 1969, 15 females, 7 males. Tel Aviv (Botanical Gardens of Tel-Aviv University), Aug. 5, 6, 1969, 2 females. On *Quercus* sp. (cups of the fruit): Allonim (YV), Oct. 27, 1966, females. Qiryat Tiv'on, Nov. 2, 1967. On *Viola* sp.: Qiryat Tiv'on, July 10, 1973, one male (N. Plaut).

Clavidromus transvaalensis (Nesbitt, 1951)

TYPE LOCALITY AND HABITAT. On ground peanuts, Nylstrom, Transvaal (South Africa), in Feb. 1947. A paratype female was found on a rat (*Rattus* sp.), at Pinellas Park, Florida (U.S.A.), on Dec. 17, 1947 (Nesbitt, 1951).

LOCATION OF TYPES: CNC (Nesbitt, 1951).

RECORDS: On *Asparagus* sp.: Miqwe Yisrael (near Tel-Aviv, July 11, 1968, females. On *Atriplex* sp.: 'En Fashkha (near the Dead Sea), May 12, 1970, a nymph. On *Citrus* sp. (litter under tree): Bet Dagan, Sept. 19, 1966, one female. On *Inula crithmoides*: 'En Fashkha, May 12, 1970. In manure heap of a donkey: Qiryat Tiv'on, June 1, 1962, 2 females (M. Costa). In chocolate: Ilanot (Sh.), May, 1, 1966, females (J. Halperin).

Seiulus amaliae Ragusa and Swirski, 1976

TYPE LOCALITY AND HABITAT. All the type specimens were collected on *Citrus limon*. Holotype and paratype females at Bagheria (Sicily), July 1972. Other paratype females found at Bagheria and at Palermo. A male was found on Corfu Island (Greece) (Ragusa and Swirski, 1976).

LOCATION OF TYPES: IEAP and AROI (Ragusa and Swirski, 1976).

RECORDS: On *Morus* sp. (leaves): Rosh Haniqra (WG), Nov. 20, 1966, females; Dec. 28, 1966, females.

NOTE: This mite was recorded in Israel under *Typhlodromus talbii* Athias Henriot on *Citrus* spp. (Porath and Swirski, 1965) and on other plants (Tova Grinberg, i.l.).

Seiulus isotrichus Athias-Henriot, 1958

TYPE LOCALITY AND HABITAT: On *Inula viscosa*, at Rasauta (Algeria), Oct. 1956 (Athias-Henriot, 1958).

LOCATION OF TYPES: MHNP (Athias-Henriot, 1958).

RECORDS: On *Inula viscosa*: Bet Oren (MC), Sept. 14, 1968. Yas'ur (WG), Oct. 8, 1968, one female. On *Sideritis* sp.: Aqua Bella (JH), Sept. 1, 1968.

Phytoseius finitimus Ribaga, 1904

TYPE LOCALITY AND HABITAT: *Buddleia madagascariensis*, Portici (Italy) (Denmark, 1966).

LOCATION OF TYPES: Female was in Ribaga's collection, but was apparently lost (Denmark, 1966).

RECORDS: On *Acer obtusifolium* (leaves): Dan (HV), July 3, 1969. On *Cistus* sp.: Montfort (WG), April 9, 1970, 5 females, 4 males. On *Dombeya mastersii*: Bet Dagan, Feb. 8, 1971 (M. Wysoki). On *Erigeron* sp.: Matta' (JH), Dec. 2, 1969. On *Ficus carica* (leaves): Aqua Bella (JH), Sept. 1968. 'En Gedi (near the Dead Sea), Dec. 12, 1968, 8 females, 2 nymphs. On *Forskahlea tenacissima*: 'En Gedi, Mar. 3, 1975, females. On *Mac-lura aurantiaca*: Miqwe Yisra'el (She.), June 19, 1968, females and males. On *Parietaria* sp.: Bezet (WG), April 23, 1970, females. On *Quercus* sp.: 'En Hemed (Aqua Bella), July 19, 1968, females and males. On *Rubus sanctus*: Bet Dagan, Jan. 3, 1968, females. On *Solanum* sp.: Wadi Poleg (Sh.), Jan. 29, 1970, 5 females. Matta', Nov. 26, 1969. On undet. Solanaceae: Wadi Poleg, Feb. 10, 1970, 6 females. On *Urtica* sp.: Matta', Nov. 26, 1969. On *Viola* sp.: Qiryat Tiv'on, May 1973, 15 females, one male, 3 nymphs; June 21, 1973, 6 females, one nymph; July 10, 1973, 4 females, 3 males, 3 nymphs (N. Plaut).

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