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# On some species related to *Elachista argentella* (Clerck, 1759) (Lepidoptera: Elachistidae)

U. Parenti (†) & F. Pizzolato

## Abstract

Eleven species related to *Elachista argentella* (Clerck, 1759) are being considered. The case of *E. subcollutella* Toll, 1936, is discussed. The female of *Elachista passerini* Traugott-Olsen, 1996, is described for the first time. *Elachista grotenfelti* Kaila, 2012 is a synonym of *Elachista nuraghella* Amsel, 1951.  
KEY WORDS: Lepidoptera, Elachistidae, *Elachista argentella*, biology, genitalia, distribution.

## Sobre algunas especies relacionadas con *Elachista argentella* (Clerck, 1759) (Lepidoptera: Elachistidae)

## Resumen

Se consideran once especies relacionadas con *Elachista argentella* (Clerck, 1759). Se discute el caso de *E. subcollutella* Toll, 1936. Se describe por primera vez la hembra de *Elachista passerini* Traugott-Olsen, 1996. *Elachista grotenfelti* Kaila, 2012 es una sinonimia de *Elachista nuraghella* Amsel, 1951.  
PALABRAS CLAVE: Lepidoptera, Elachistidae, *Elachista argentella*, biología, genitalia, distribución.

## Su alcune specie affini a *Elachista argentella* (Clerck, 1759) (Lepidoptera: Elachistidae)

## Riassunto

Vengono prese in esame undici specie affini ad *Elachista argentella* (Clerck, 1759). Viene discusso il caso di *E. subcollutella* Toll, 1936. E' descritta per la prima volta la femmina di *Elachista passerini* Traugott-Olsen, 1996. *Elachista grotenfelti* Kaila, 2012 è sinonimo di *Elachista nuraghella* Amsel, 1951.  
PAROLE CHIAVE: Lepidoptera, Elachistidae, *E. argentella*, biologie, genitali, distribuzione.

## Introduction

*Elachista argentella* (Clerck, 1759) has a wingspan that can reach 12 mm. Labial palpi, head, antennae, tegulae and thorax are white. Forewing white. Out of the eleven species here considered *E. dumosa* Parenti, 1981, *E. nuraghella* Amsel, 1951, *E. passerini* Traugott-Olsen, 1996 and the female of *E. neapolisella* Traugott-Olsen, 1985 recall the habitus of *argentella*.

The forewings are yellowish white with some tiny, sparse groups of blackish scales. in *E. baldizzonei* and of a light ochre colour in the male of *E. neapolisella*.

In the other species the referring habitus is the one of *E. gormella*. On the silvery white ground

of the forewings there is a basal area and two fasciae, a median one and another towards the apex, all yellowish. A more or less broad stretch of the costa is occupied by brown scales. On the whole wing surface there are sparse groups of very few, 2-3, scales of a dark brown colour.

In the male genitalia of the twelve species here considered the uncus lobes are not very developed in *E. argentella*, *E. neapolisella*, *E. nuraghella*; elongate and triangular in *E. baldizzonei*, *E. collitella*, *E. passerini*, *E. subocellea*; oval or suboval in the other species. Ventral side of the uncus lobes with few short setae. Gnathos oval elongated. Costa of the valva slightly concave from about the middle up to the rounded cucullus. Juxta lobes wide fan-shaped, apical margins with few tiny setae. Aedeagus: the cornutus may not be present, it may be tiny or it may be a robust thorn-shaped structure.

Concerning female genitalia, the variability is marked and is seen above all in the morphology of papillae anales, in the different degree of sclerotization of the colliculum, reinforced by two lateral grooves, in the morphology and size of the bursa and, when present, of the signum. The examination of the spermathecae has, moreover, permitted us to point out three significantly different models (Fig. 1a, b, c) that enable us to identify the corresponding species groups: the first (Fig. 1a) includes *E. argentella*, *E. nuraghella* and *E. neapolisella*; the second (Fig. 1c) *E. pollinariella* and, perhaps, *E. dumosa*, *E. gormella* and *E. olschwangi*; the third (Fig. 1b) the remaining taxa.

## Material and methods

This paper is based on material obtained from the following collections: Zoologische Staatssammlung München (A. Hausmann and A. Segerer), Museo Regionale di Scienze Naturali, Torino (L. Picciau), Museo Friulano di Storia Naturale (C. Morandini), and the private collection of G. Bassi (Avigliana, Torino).

### CHECK-LIST OF THE EXAMINED SPECIES:

*Elachista argentella* (Clerck, 1759)  
*Elachista baldizzonei* Traugott-Olsen, 1996  
*Elachista collitella* (Duponchel, 1843)  
*Elachista dumosa* Parenti, 1981  
*Elachista gormella* Nielsen & Traugott-Olsen, 1987  
*Elachista neapolisella* Traugott-Olsen, 1985  
*Elachista nuraghella* Amsel, 1951  
*Elachista olschwangi* Kaila, 2003  
*Elachista ozeini* Parenti, 2004  
*Elachista passerini* Traugott-Olsen, 1996  
*Elachista pollinariella* Zeller, 1839  
*Elachista subocellea* (Stephens, 1834)

## Results

*Elachista argentella* (Clerck, 1759)  
 [*Phalaena*] *argentella* Clerck, 1759, pl. 11, fig. 13  
*Tinea cygnipennella* Hübner, 1796: 67, pl. 50, fig. 207  
 ? *Tinea alabastrella* Schrank, 1802: 121  
*Porrectaria cygnipennis* Haworth, 1828: 536  
*Adela cygnella* Treitschke, 1833: 117  
*Apheloesia semialbella* Stephens, 1834: 288  
*Elachista habeleri* Traugott-Olsen, 1990: 274

Diagnosis: Wingspan 10-12 mm. Male (Fig. 34) and female: head, tegulae and thorax white. Forewing plain white.

Male genitalia (Fig. 7): Uncus with a short apical incision. Gnathos elongated, oval. Aedeagus much shorter than the valva: the cornutus is a tiny dentate plate.

Female genitalia (Fig. 19): Papillae anales large. Apophyses posteriores slightly longer than the anteriores. Colliculum short. In the large, oval corpus bursae, the signum is an irregular dentate plate.

Biology: The larva is greenish grey. Sclerotized plates of the larva (Fig. 30 d, e, f). Pupa (Fig. 31). Parasitoids. Hymenoptera, Encyrtidae: *Copidosoma dius* (Walker, 1837), Eulophidae: *Cirrospilus vittatus* Walker, 1838. Hostplants. Gramineae: *Agrostis* sp., *Avenula pratensis*, *A. pubescens*, *Brachypodium pinnatum*, *B. sylvaticum*, *Bromus erectum*, *B. sterilis*, *Calamagrostis epigejos*, *Dactylis glomerata*, *Deschampsia* sp., *Elymus arenarius*, *E. repens*, *Festuca rubra*, *F. trachyphylla*, *F. valesiaca*, *Holcus mollis*, *Koeleria cristata*, *K. glauca*, *K. grandis*, *K. macrantha*, *Leymus arenarius*, *Phleum* sp., *Poa pratensis*, *Typhoides arundinacea*.

Distribution: Widely distributed in Europe

Notes: The synonymy of *E. habeleri* Traugott-Olsen with *E. argentella* (Clerck) was established by HUEMER (2000).

*Elachista baldizzonei* Traugott-Olsen, 1996

*Elachista baldizzonei* Traugott-Olsen, 1996: 126

Diagnosis: Wingspan 8-9 mm. Male (Fig. 2) and female: on the yellowish white ground of the forewing some tiny, sparse groups of blackish scales.

Male genitalia (Fig. 8): Uncus lobes triangular, long and thin. The aedeagus, straight, a little shorter than the valva, in the distal tract there is dorsad a very evident digitiform structure; a long and thin thorn-like cornutus dentellate basally on the dorsal edge.

Female genitalia (Fig. 20): Ostium jarlike. Ductus bursae covered mostly by a thick series of pleats. Bursa pyriform, with two longitudinal patches of spines.

Biology: Unknown.

Distribution: Alps from Italy, and Austria.

*Elachista collitella* (Duponchel, [1843])

*Oecophora collitella* Duponchel, [1843] 1842, in Godart: 327

*Poeciloptilia grossepunctella* Herrich-Schäffer, 1855: 302, 312

Diagnosis: Wingspan 7-9 mm. Male (Fig. 35): frons white. Forewing ground colour white; base of costa dark grey; many black brown tipped scales scattered as small dots. Basal, medial and apical areas suffused with beige tipped scales. Female (Fig. 36): antenna distinctly annulated whitish-brownish. Forewing generally paler.

Male genitalia (Fig. 9): Uncus lobes elongate, triangular with the apex rounded. Gnathos elongate. Digitate process club-shaped. Aedeagus shorter than the valva; the cornutus is a strong bent tooth with a wide base covered with several thin and small teeth.

Female genitalia (Fig. 21): Distal edge of the antrum convex. Colliculum strongly sclerotized; middle portion of ductus bursae with fine internal spines; corpus bursae without signum.

Biology: Parasitoid. Hymenoptera, Ichneumonidae: *Gelis gonatopinus* (Thompson, 1884) (PARENTI *et al.*, 1995). Hostplants. Gramineae: *Festuca ovina*, *F. valesiaca*, *Koeleria cristata*, *Poa pratensis*.

Distribution: Widespread in Europe except in Scandinavia.

*Elachista dumosa* Parenti, 1981

*Elachista dumosa* Parenti, 1981: 58

*Elachista kimmeriella* Sinev & Budashkin, 1991: 577

Diagnosis: Wingspan 10-11 mm. Male (Fig. 37): head, tegulae and thorax white. Forewing plain white. Hindwing grey.

Male genitalia (Fig. 10): Uncus lobes big, oval, separated by a thin and long cut. Aedeagus slightly sinuous: cornutus as a thin straight dentate strip (Fig. 11 A) or bent (Fig. 11 B).

Female genitalia: Unknown.

Biology: Unknown.

Distribution: Crimea, Macedonia.

*Elachista gormella* Nielsen & Traugott-Olsen, 1987

*Elachista gormella* Nielsen & Traugott-Olsen, 1987

Description: Wingspan 9-11 mm. Male (Fig. 38) and female: the wing pattern of *gormella* is similar to that of *collitella*. Head and thorax whitish grey like the forewing on which there is a white basal area and two fasciae of which the subterminal one has the same colour. Few sparse dots of black brown scales. A distinct blackish cilia line.

Male genitalia (Fig. 11): Uncus lobes long and suboval. Aedeagus slightly bent dorsad and pointed apically; cornutus as a small dentate oval plate.

Female genitalia (Fig. 22): Papillae anales triangular. Antrum cup-shaped, slightly bell-shaped. Ductus bursae with numerous granular microsclerotizations above all in the proximal part. Bursa round; the signum is a big irregular plate, dentate on the edges. The female genitalia of *gormella* differ from that of *E. pollinariella* - close to it - by the different morphology of the papillae anales, the absence of the roughly X-shaped sclerotization on the VIIIth sternite, and the signum that is almost twice as large.

Biology: Unknown.

Distribution: Austria, Czech Republic (LIŠKA, 1998), France, Germany, Hungary, Italy, Slovakia, Spain (Andalusia, Balearic Islands (Mallorca)), Portugal (PASSOS DE CARVALHO & CORLEY, 1995), Ukraine, Yugoslavia.

*Elachista neapolisella* Traugott-Olsen, 1985

*Elachista neapolisella* Traugott-Olsen, 1985: 169

Diagnosis: Wingspan 11-12 mm. Sexual dimorphism enhanced. Male (Fig. 3): head and thorax white with yellowish hues; antennae thick, of a light ochre colour like the forewing; hindwing dark ochre. Female (Fig. 4): antennae thin and wings silvery white with yellowish hues.

Male genitalia (Fig. 12): Uncus with several long and thin setae in the ventro-lateral area. Uncus lobes divided by a wide V-shaped cut. Aedeagus about two thirds the length of the valva; cornutus as a thin and poorly evident rod.

Female genitalia (Fig. 23): Apophyses posteriores double the anteriores in length. After the thin colliculum, the ductus bursae has many granular microsclerotizations in the terminal part that are present, though less in number, in the roundish bursa. The signum is a big plate, dentate on the edges.

Biology: Unknown.

Distribution: Only known from the type locality, Neapolis (Crete).

*Elachista nuraghella* Amsel, 1951

*Elachista nuraghella* Amsel, 1951: 140

*Elachista grotenfelti* Kaila, 2012: 62. **syn. nov.**

Diagnosis: Wingspan 12-14 mm. Male (Fig. 39) and female: the habitus is that of *argentella*, i.e. head, tegulae and thorax white. Forewing plain white.

Male genitalia (Fig. 13): Uncus long, subtriangular, slightly incised apically; many short and thin setae in the ventro-lateral areas. Digitate process poorly developed, about one sixth of the valva's length. Aedeagus straight, about half the valva in length; the cornutus is a poorly sclerotized plate with small teeth of different sizes on the edges.

Female genitalia (Fig. 24): The wide papillae anales show a thick cover of conical microsclerotizations emerging from circular bases. Apophyses strong of almost equal length. Ostium bursae short and tubular; in the proximal part the ductus bursae is strongly sclerotized, while in the

distal part there are only sparse granular microsclerotizations. The signum is a wide plate, dentate on the edges.

Biology: Hostplants. Gramineae: *Dasyphyrum villosum* (from coll. Kasy) (PARENTI & VARALDA, 1994).

Distribution: Algeria, Bulgaria, Corsica, France (NEL *et al.*, 1996), Greece, Italy, Jugoslavia, Macedonia, Malta (KAILA & MUTANEN, 2012), Morocco, Portugal (CORLEY *et al.*, 2000), Sardinia, Sicily, Spain (Almeria, Balearic Islands (Mallorca)), Syria, Tunisia (KAILA & MUTANEN, 2012), Turkey.

Notes: according to KAILA & MUTANEN (2012) the adults of *Elachista nuraghella* from Turkey, Greece and Bulgaria differ on the basis of the results of DNA barcoding from those from France, Italy, Malta, Spain and Tunisia and have to be assigned to a new species, *Elachista grotenfelti*.

Phenetically the two species are similar: forewings unicolorous white or creamy white and paler or darker grey hindwings.

The pattern of the genitalia is similar in the two species for both sexes. In the male genitalia of *nuraghella* the cornutus is about 1/4 of the length of the aedeagus while it is 1/3 of the length of the aedeagus in *grotenfelti*. The morphology of the aedeagus and of the cornutus is similar in the two species. In the female genitalia the ductus bursae is narrower and tubular in *nuraghella*, thick and posteriorly dilated in *grotenfelti*. It seems useful to point out that in both species the papillae anales show a thick cover of conical microsclerotifications emerging from the circular base, the only example in the species of Elachistidae that we know.

The differences regarding genitalia do not seem meaningful, they come within the intraspecific variability and concern structures which are not directly involved in mating and which therefore seem extraneous to the mechanism of lock and key of the genitalia of the two sexes.

The existence of a conflict between the results of the molecular investigation and the morphological observations is evident.

The problem has two possible solutions: in the first case we could use the same method adopted by HAUSMANN & HUEMER (2011) for *Acasis appensata* (Eversman, 1832) and therefore describe *E. grotenfelti* as a subspecies of *E. nuraghella* in order to point out the genetic difference; in the second case we could consider *grotenfelti* a synonym of *nuraghella*.

The second solution has been chosen.

*Elachista olschwangi* Kaila, 2003

*Elachista olschwangi* Kaila, 2003: 70

Diagnosis: Wingspan 8-11 mm. Male (Fig. 40) and female: head and thorax silvery white like the forewing on which small and sparse dots of black brown scales stand out; at two thirds of the wing and toward the termen there are two faint yellowish stripes. Cilia line missing.

Male genitalia (Fig. 14): Uncus lobes with deep V-shaped indentation. Aedeagus straight, as long as the valva, the diameter of which is reduced significantly in the distal part up to the thin rounded apex: cornutus is a thin and short poorly sclerotized structure.

Female genitalia (Fig. 25): Most of the long and thin ductus bursae is covered internally with granular microsclerotizations. In the bursa there is a long dentate signum.

Biology: Unknown.

Distribution: South France, Russia (Southern Ural Mountains), Siberia (Kaila, pers. com.).

*Elachista ozeini* Parenti, 2004

*Elachista ozeini* Parenti, 2004: 45

Diagnosis: Wingspan, 8-10 mm. Male (Fig. 41) and female (Fig. 42): antennae ringed with white and brown, particularly evident in females. Forewing ground colour silky white with three yellowish areas, sometimes very reduced or even missing. On these areas some sparse groups of two-three brown scales.

Male genitalia (Fig. 15): Uncus lobes very developed, with the apex rounded. Gnathos elongated,

oval. Aedeagus slightly sinuous and a little shorter than the valva; the cornutus is a thin and poorly sclerotized fascia, with some small teeth at the distal end.

Female genitalia (Fig. 26): Antrum cup-like, flared, involving the whole abdominal segment. Colliculum short, strengthened by a sclerotized groove. Almost along all the long ductus bursae there are many thin transversal crests. Bursa suboval, with a relatively large signum, dentate and V-shaped.

Biology: Described by PARENTI (2004). Sclerotized plates of the larva (Fig. 30g, h, i). Pupa (Fig. 32). Hostplants. Gramineae: *Koeleria vallesiana*.

Distribution: Italy, Aosta Valley.

*Elachista passerini* Traugott-Olsen, 1996

*Elachista passerini* Traugott-Olsen, 1996: 123

Diagnosis: Wingspan 7-10 mm. Male (Fig. 5) and female colour shining white from head to wing fringes.

Male genitalia (Fig. 16): Uncus lobes triangular, long and thin, divided by a wide V cut. Digitate processes long, thin and slightly curved in the median part. Aedeagus straight, a little shorter than the valva; a showy digitiform membranous structure protrudes from the distal end; cornutus very distinct with a long, plain, curved, apical portion, basally with minute thorns.

Female genitalia (Fig. 27): Antrum jarlike; the strongly sclerotized colliculum is followed by the long ductus bursae, with a longitudinal fascia of granular microsclerotizations. Bursa small, oval, with a small dentate signum.

Biology: Unknown.

Distribution: France, Italy, Spain.

*Elachista pollinariella* Zeller, 1839

*Elachista pollinariella* Zeller, 1839: 213

Diagnosis: Wingspan 8-10 mm. Male (Fig. 43) and female (Fig. 44): head white. The white ground of the forewing, on which some spots or fasciae of an irregular shape and of a light ochre colour may be present, is dotted by tiny groups of black-tipped scales. Cilia line distinct.

Male genitalia (Fig. 17): Uncus lobes wide, oval and separated by a long V-shaped incision. Gnathos oval elongated. Aedeagus about 2/3 of the valva in length, slightly bent dorsal in the distal part: the cornutus is an agglomerate of small teeth emerging from a slightly sclerotized base.

Female genitalia (Fig. 28): Papillae anales large. On the VIIIth sternite there is a rough X-shaped sclerotization. Antrum funnel-shaped followed by a long and thin ductus bursae. Signum: a small plate of an irregular shape, dentate.

Biology: Described by STEUER (1987) and more recently by PARENTI (2006). The larva, of a dirty white colour, reaches a length of 5-6 mm at the end of its development. Sclerotized plates of the larva (Fig. 30a, b, c). Pupa (Fig. 33). Parasitoid. Hymenoptera: Ichneumonidae: *Phaecogenes melanogonus* Gmelin, 1829. Hostsplants. Gramineae: *Brachypodium sylvaticum*, *Elymus repens*, *Festuca arvensis*, *F. longifolia*, *F. ovina*, *F. rubra*, *Poa pratensis*, *P. trivialis*, *Trisetum flavescens*.

Distribution: Widespread in Europe. Not in Britain.

*Elachista subocellea* (Stephens, 1834)

*Apheloseitia subocellea* Stephens, 1834: 290

*Elachista (Ornix) flammeaepennella* Costa, [1836]: [298], [313]

*Poeciloptilia disertella* Herrich-Schäffer, 1855: 302, 311

? *Elachista subcollutella* Toll, 1936: 409

Diagnosis: Wingspan, 8-10 mm. Male (Fig. 45) and female: on the ground colour of the silvery white forewing there is a basal area, a median fascia and another one towards the apex, all yellowish. A

more or less broad part of the costa is occupied by brown scales. On the whole wing surface there are sparse groups of very few, 2-3, dark brown scales. Cilia line well marked.

Male genitalia (Fig. 18): Uncus lobes wide, triangular, separated by a wide V cut. Gnathos oval, elongated. Aedeagus a little shorter than the valva and bent dorsad in the distal part, with a very showy thorn-shaped cornutus accompanied at the base by a swarm of small teeth.

Female genitalia (Fig. 29): Antrum tubular; colliculum bent loopwise and run by long strongly sclerotized ribs; the ductus bursae flows without interruption with the bursa, that is pyriform without any signum.

Biology: Described by MARTINI (1912). Hostplants. Graminaeae: *Brachypodium pinnatum*, *B. sylvaticum*.

Distribution: Widespread in Europe

Notes: Dr. Andrzej Skalski of the Museum of Czeszochowa (Poland) sent me in 1975 the photograph of the Holotypus ♂ of *E. subcollutella* Toll, 1936 (Fig. 6) and in 1988 the specimen, however without abdomen, with head and thorax damaged and the right hind wing partly detached. For a long time *subcollutella* has been considered as a synonym of *E. subocellea*, but without the examination of genitalia no conclusion is possible, at least at present.

## Discussion

Of the eleven European species of Elachistidae related to *Elachista argentella*, only two, *E. dumosa* and *E. olschwangi* are not, currently, recorded for Italy. The first description of the female of *E. passerini* Traugott-Olsen is given. *Elachista grotenfelti* Kaila, 2012 is a synonym of *Elachista nuraghella* Amsel, 1951. The biology is unknown for seven taxa. In the examined larvae, the tergal, sternal and anal plates show a strong sclerotization (Fig. 30). The two tergal plates of the prothorax are both L-shaped, with the lower arm more or less developed; the sternal plate has the shape of a thin sand-glass that narrows at two thirds of its length; the anal plate is a suboval structure with a rugged edge. The host plants are Graminaeae.

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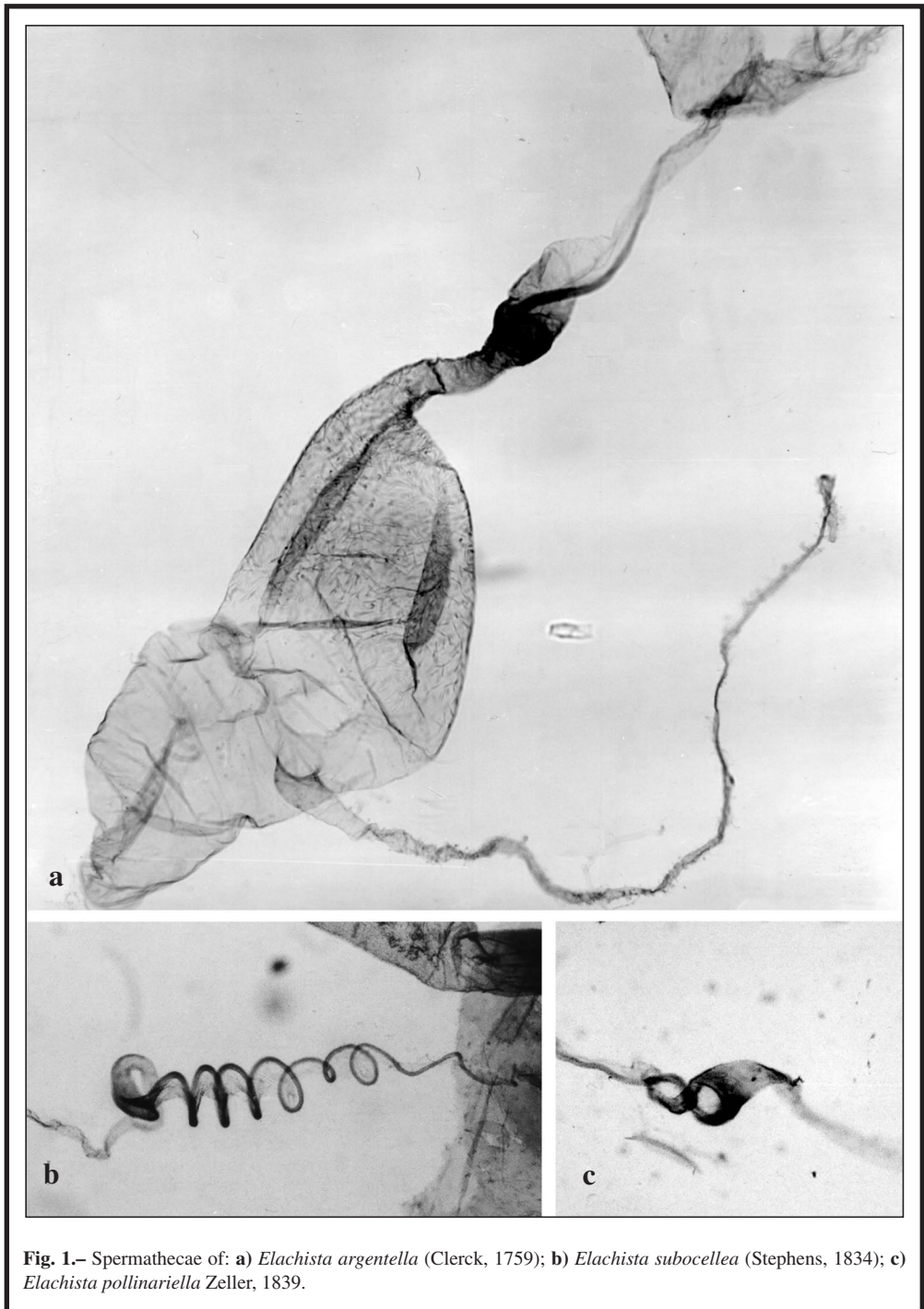
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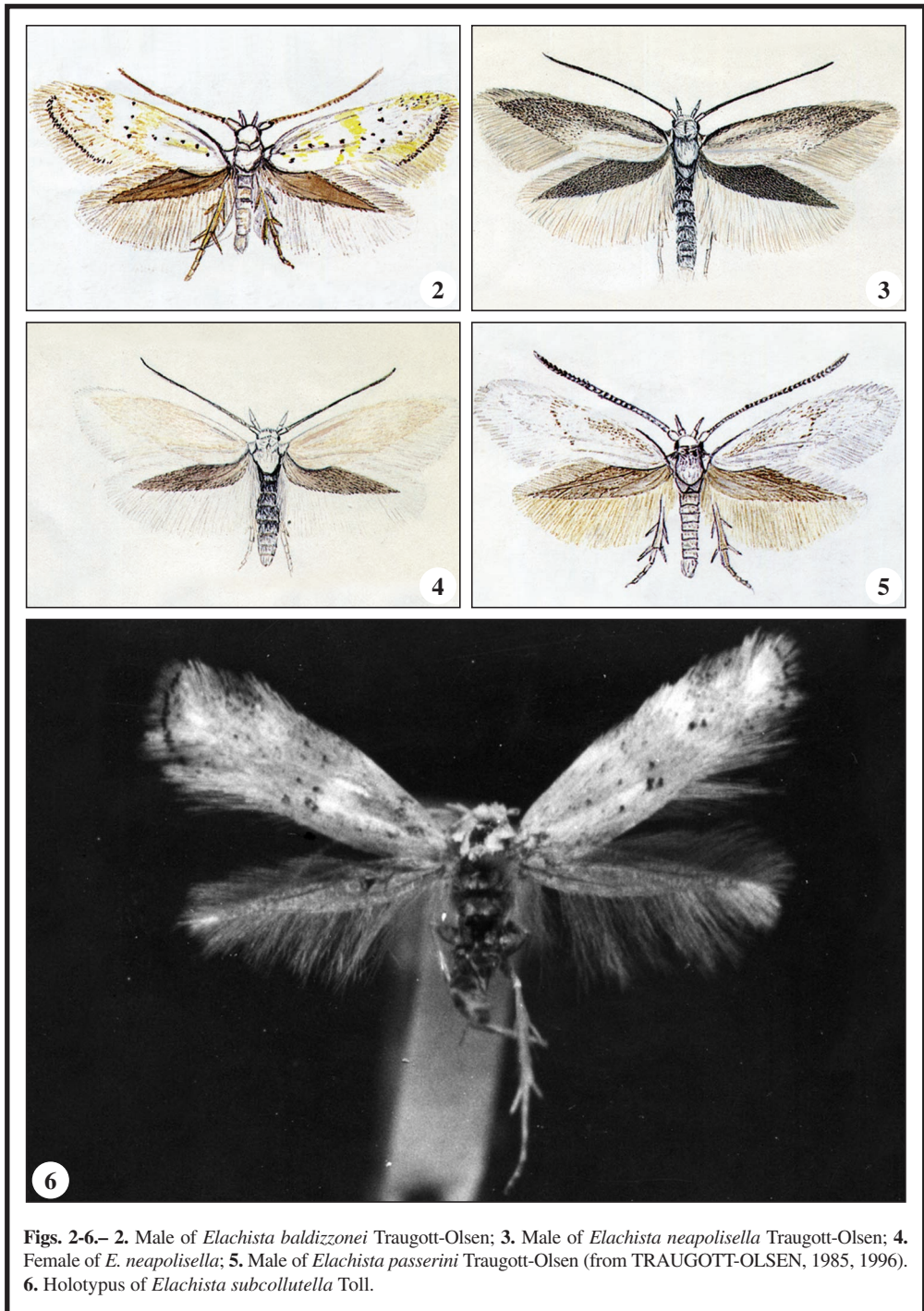
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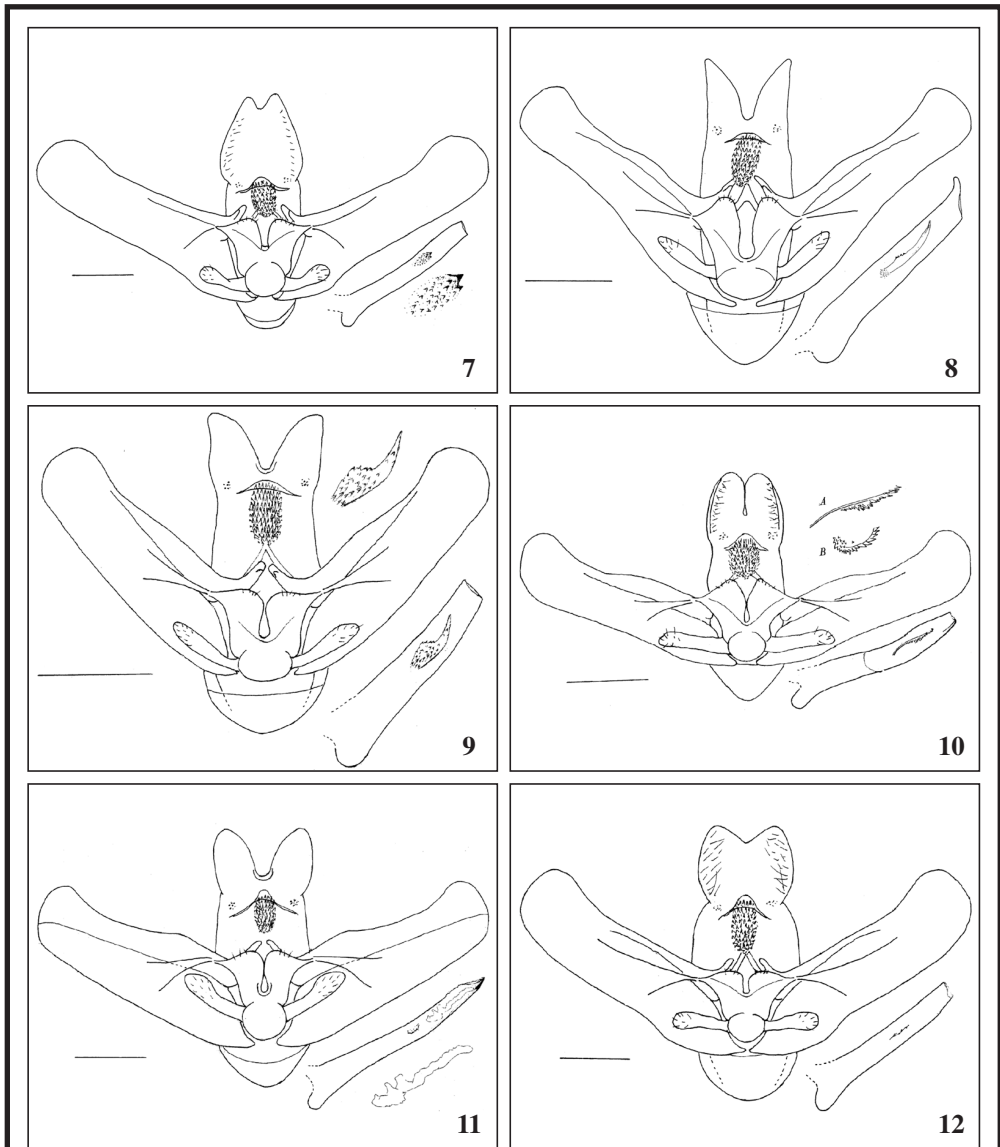
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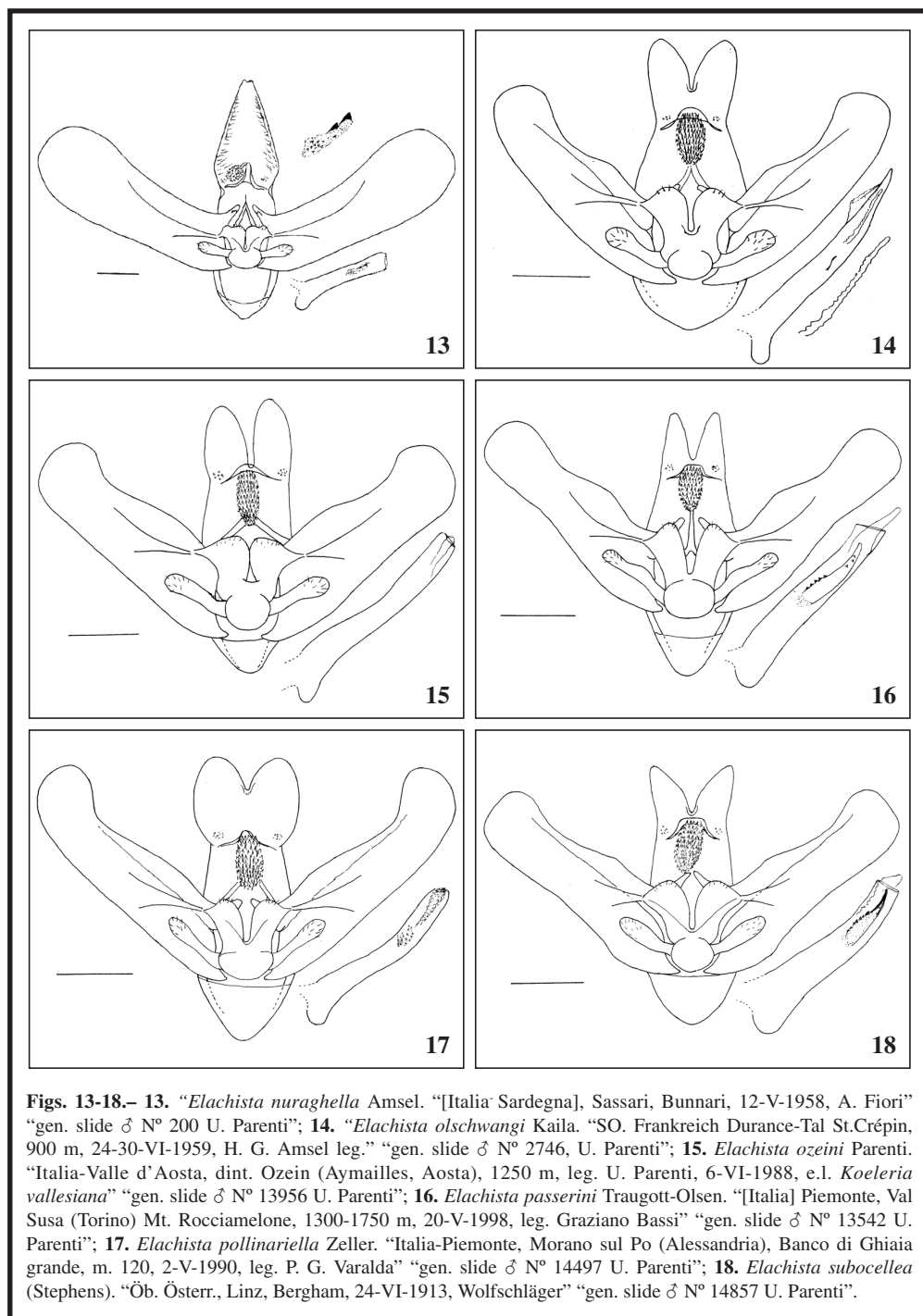
**Fig. 1.**– Spermathecae of: **a)** *Elachista argentella* (Clerck, 1759); **b)** *Elachista subocellea* (Stephens, 1834); **c)** *Elachista pollinariella* Zeller, 1839.

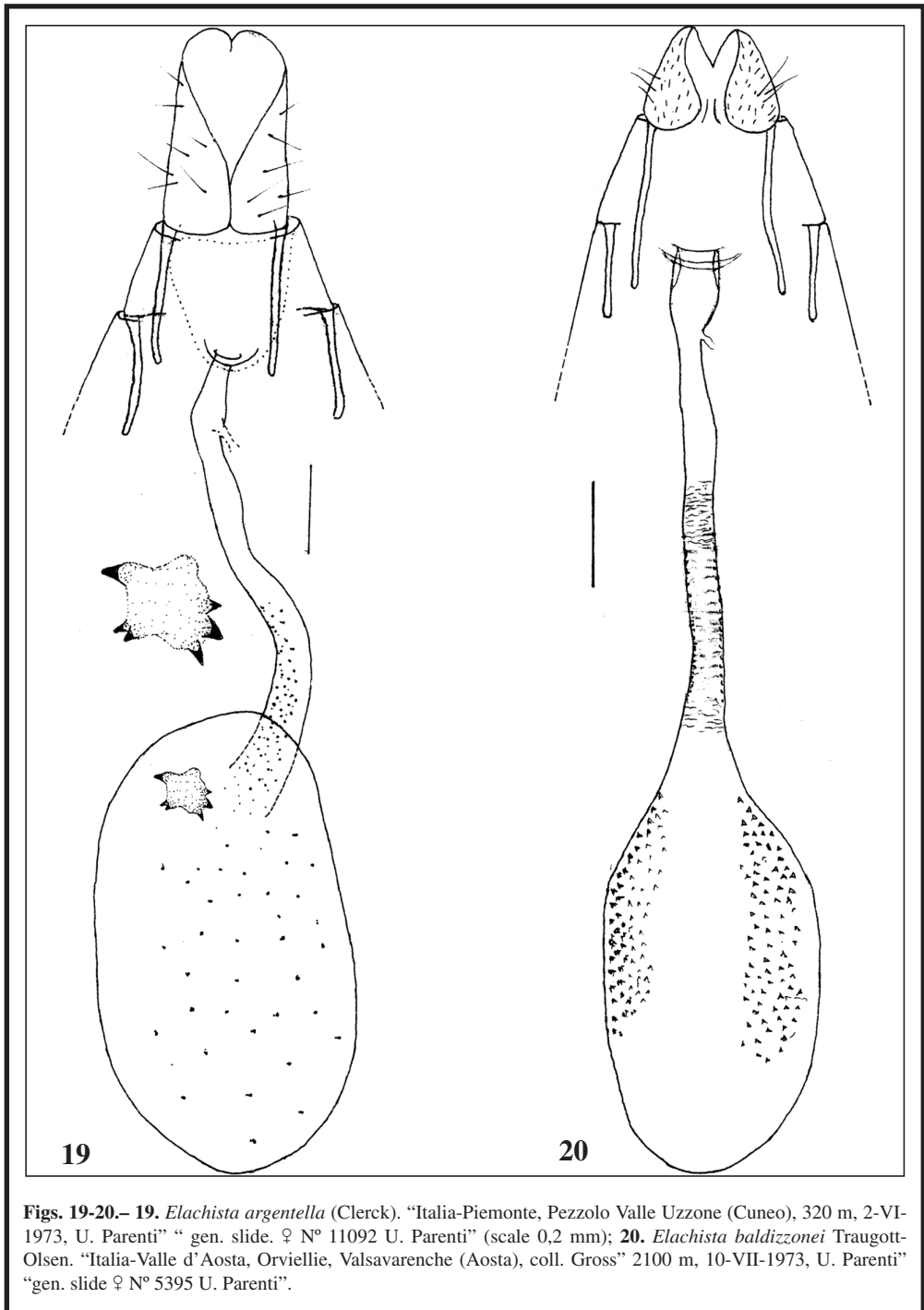


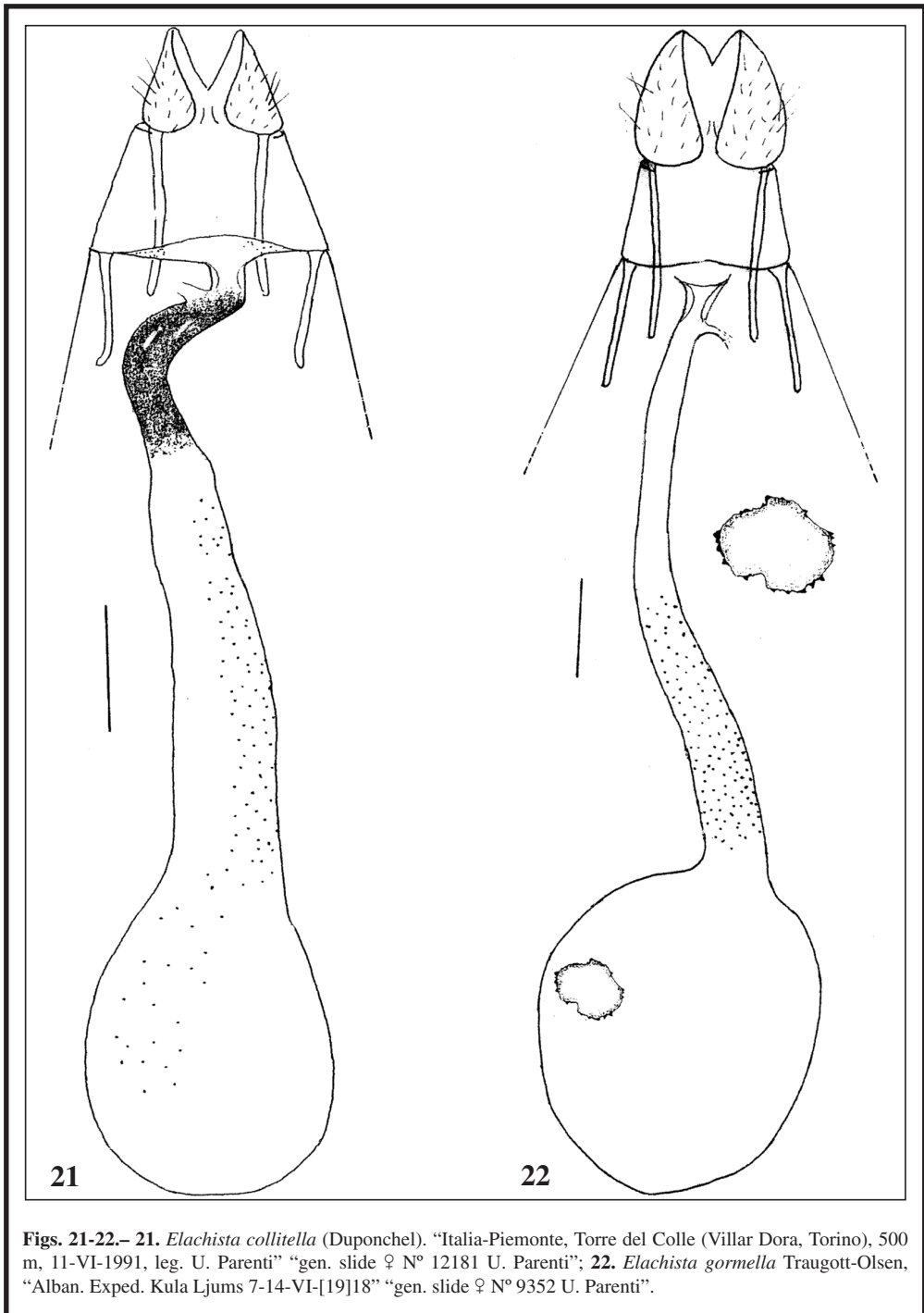
**Figs. 2-6.**– 2. Male of *Elachista baldizzonei* Traugott-Olsen; 3. Male of *Elachista neapolisella* Traugott-Olsen; 4. Female of *E. neapolisella*; 5. Male of *Elachista passerini* Traugott-Olsen (from TRAUGOTT-OLSEN, 1985, 1996). 6. Holotypus of *Elachista subcollutella* Toll.



**Figs. 7-12.**— **7.** *Elachista argentella* (Clerck). “Italia-Piemonte, Pezzolo Valle Uzzone (Cuneo), 320 m, 2-VI-1973, U. Parenti” “gen. slide ♂ N° 5256 U. Parenti”. (scale 0,2 mm); **8.** *Elachista baldizzonei* Traugott-Olsen. “Italia-Valle d’Aosta, Orviellie, Valsavarenche (Aosta), 2100 m, 10-VII-1973, U. Parenti” “gen. slide ♂ N 2005 U. Parenti”; **9.** *Elachista collitella* Duponchel. “Italia-Piemonte, Caselette (Torino), falde del Monte Musinè, 450 m, 26-V-1983, leg. U. Parenti” “gen. slide ♂ N° 11758, leg. U. Parenti”; **10.** *Elachista dumosa* Parenti. “Holotypus” “Macedonia Ohrid, Petrina plan. 17-26-VI-1959, J. Klimesch” “gen. slide ♂ N° 3755 U. Parenti”; **11.** *Elachista gormella* Traugott-Olsen. “[Italia]-Friuli V[enezia] G[ulia], UL 87 GO Carso Goriziano, Lago di Doberdò, 4-V-1999, legit Morin L.” “gen. slide ♂ N° 14295 U. Parenti”; **12.** *Elachista neapolisella* Traugott-Olsen. “Creta or. Neapolis, 400 m, 4-V-1984, J. Klimesch” “gen. slide ♂ N° 14743 U. Parenti”.

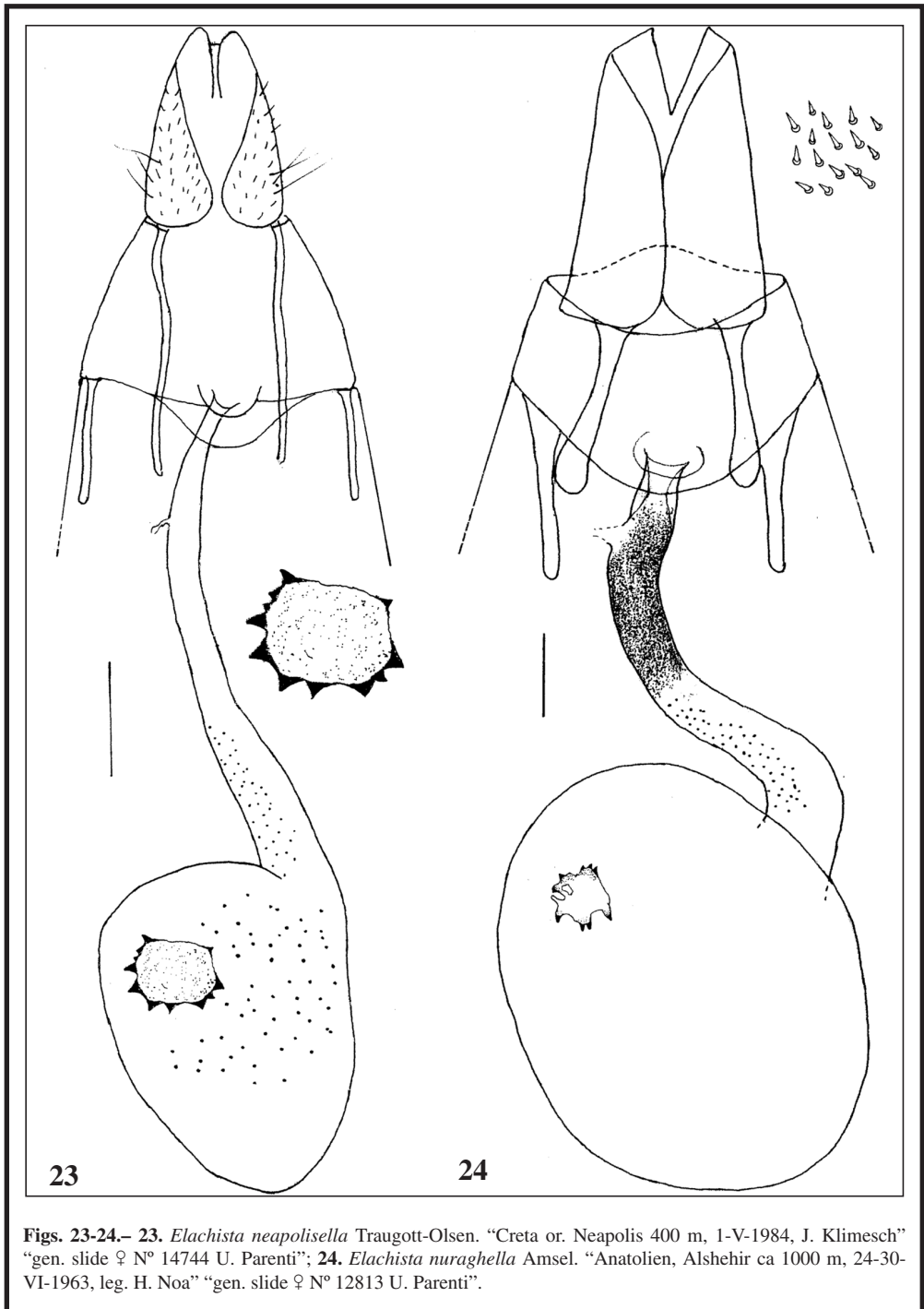


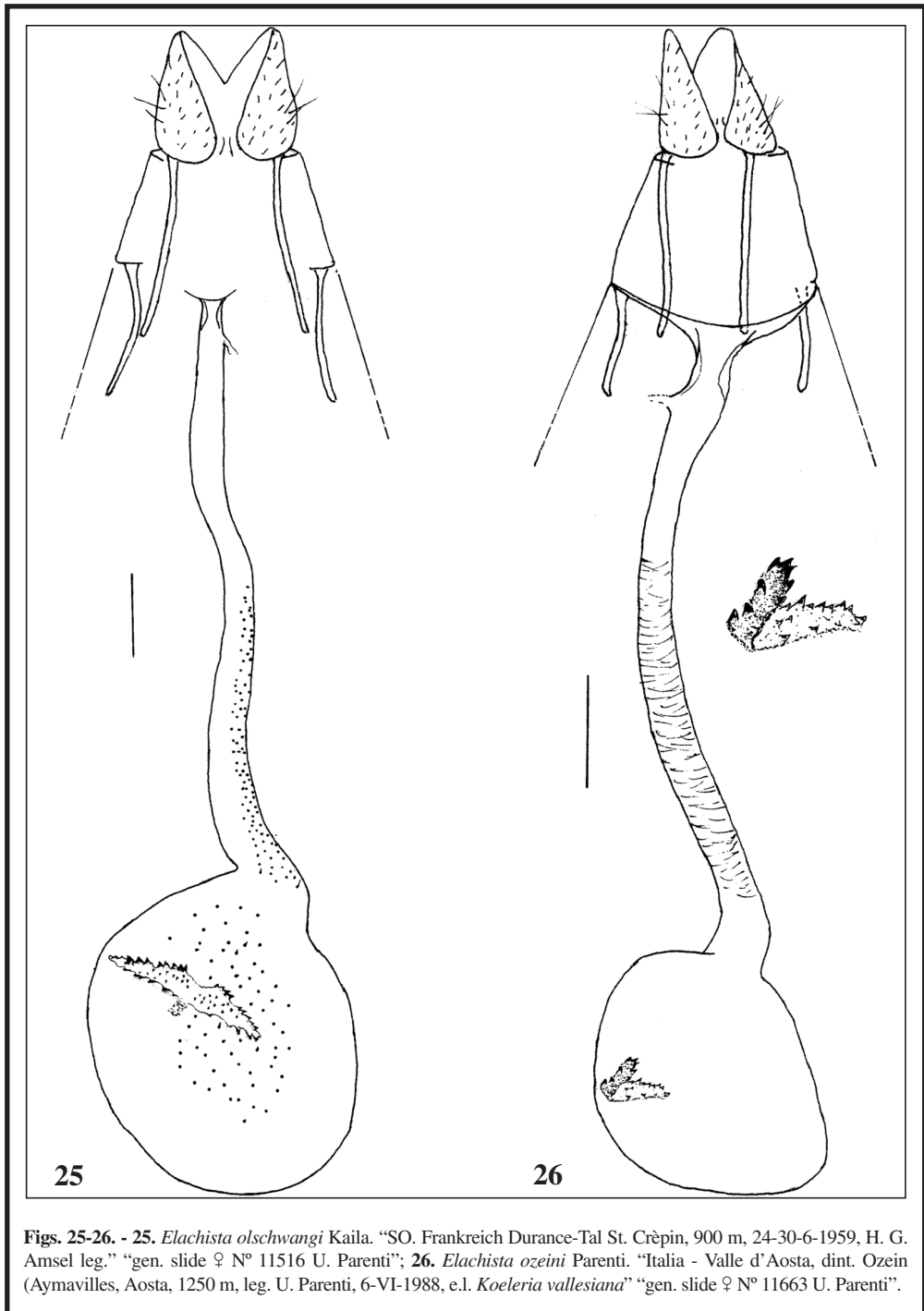




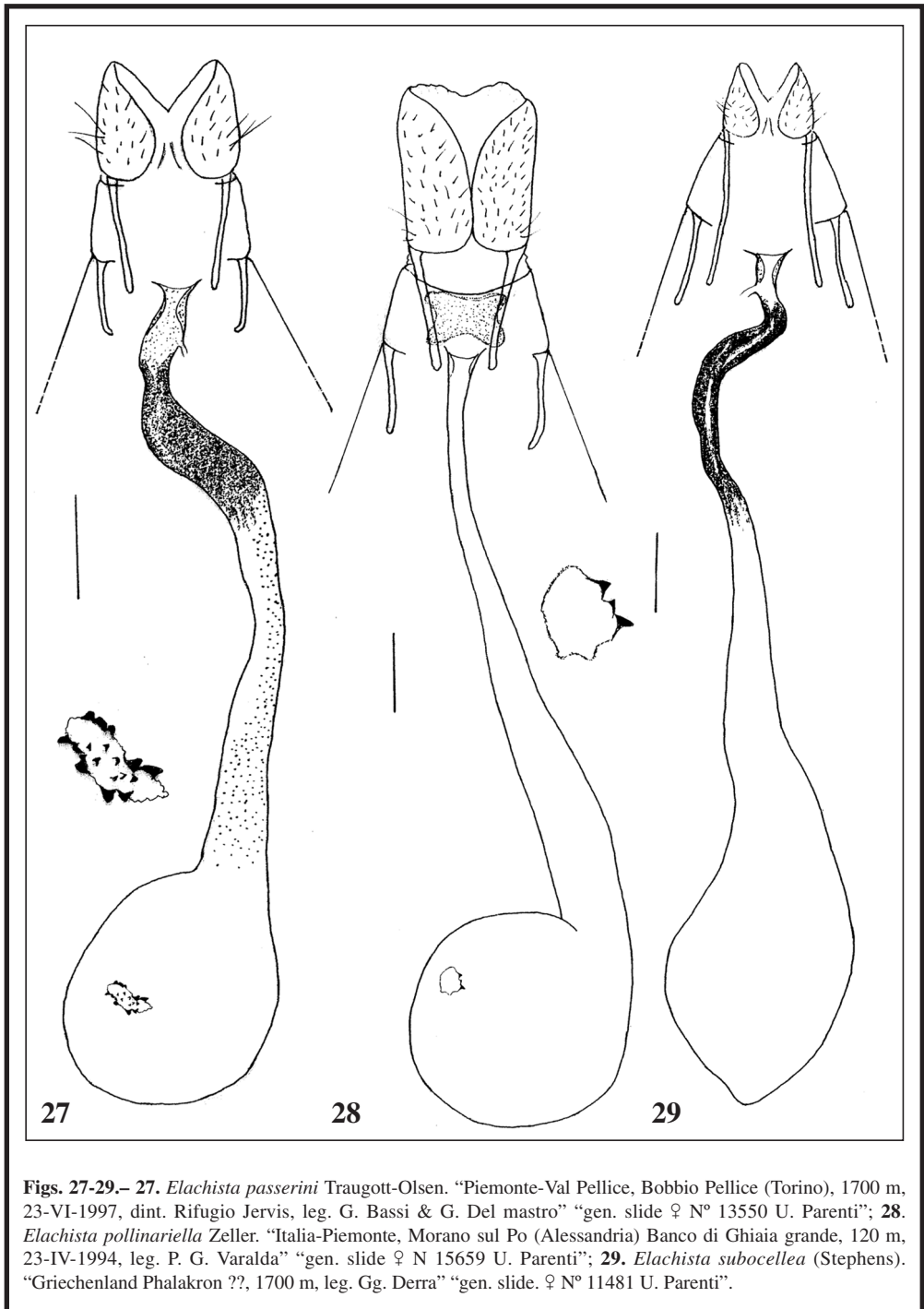
**Figs. 21-22.**— 21. *Elachista collitella* (Duponchel). “Italia-Piemonte, Torre del Colle (Villar Dora, Torino), 500 m, 11-VI-1991, leg. U. Parenti” “gen. slide ♀ N° 12181 U. Parenti”; 22. *Elachista gormella* Traugott-Olsen, “Alban. Exped. Kula Ljums 7-14-VI-[19]18” “gen. slide ♀ N° 9352 U. Parenti”.



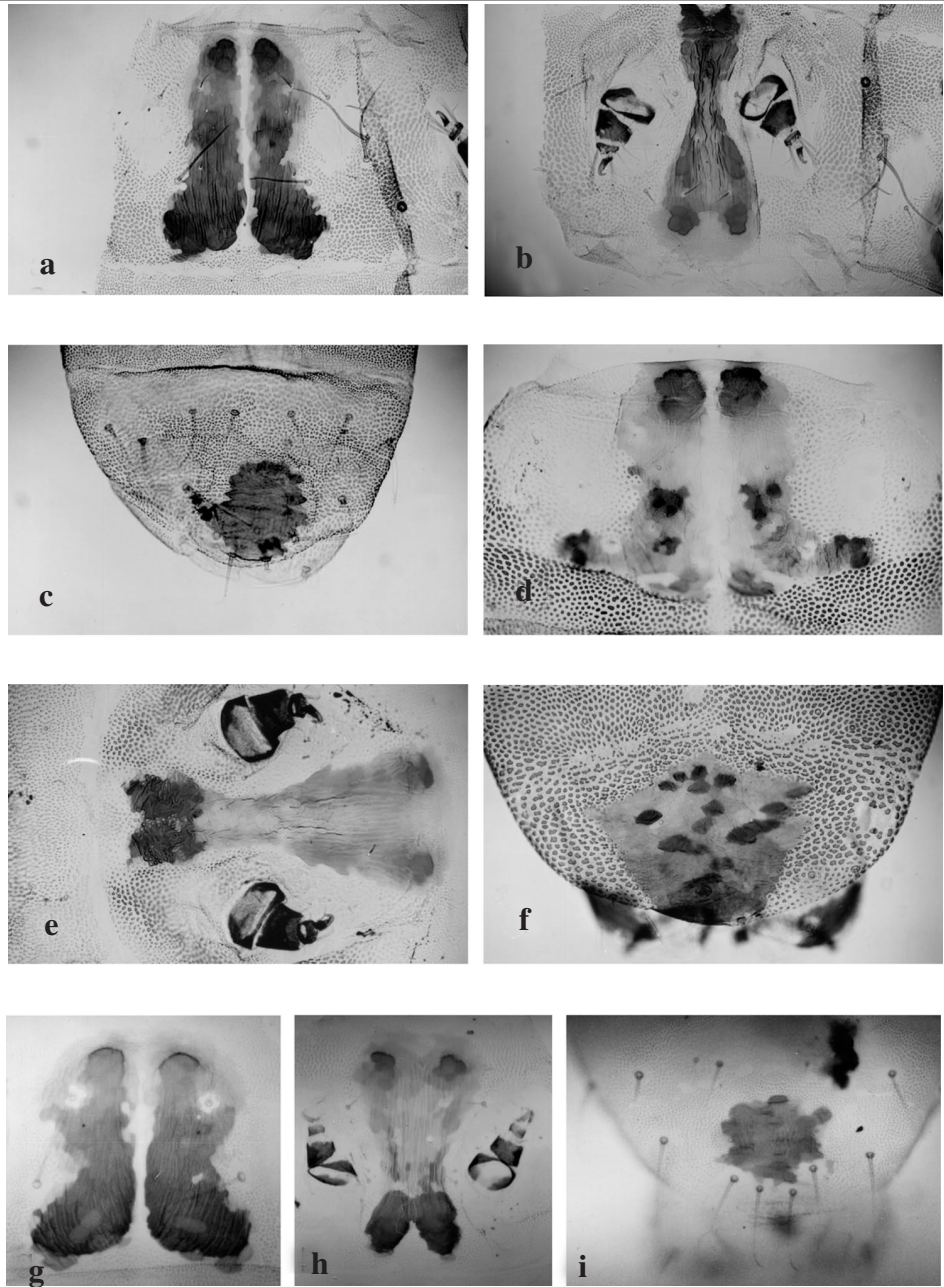




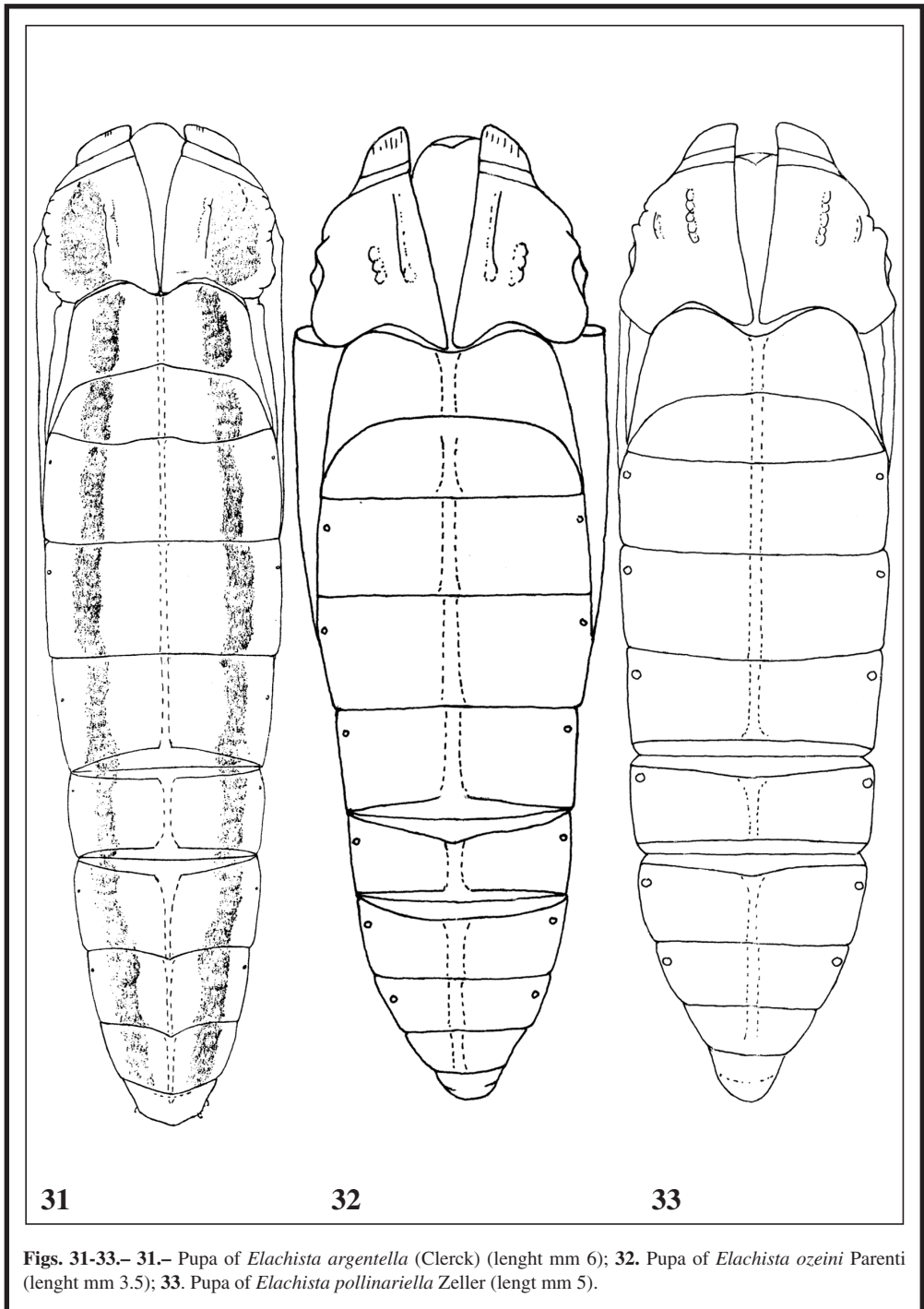
**Figs. 25-26.** - 25. *Elachista olschwangi* Kaila. "SO. Frankreich Durance-Tal St. Crèpin, 900 m, 24-30-6-1959, H. G. Amsel leg." "gen. slide ♀ N° 11516 U. Parenti"; 26. *Elachista ozeini* Parenti. "Italia - Valle d'Aosta, dint. Ozein (Aymavilles, Aosta, 1250 m, leg. U. Parenti, 6-VI-1988, e.l. *Koeleria vallesiana*" "gen. slide ♀ N° 11663 U. Parenti".

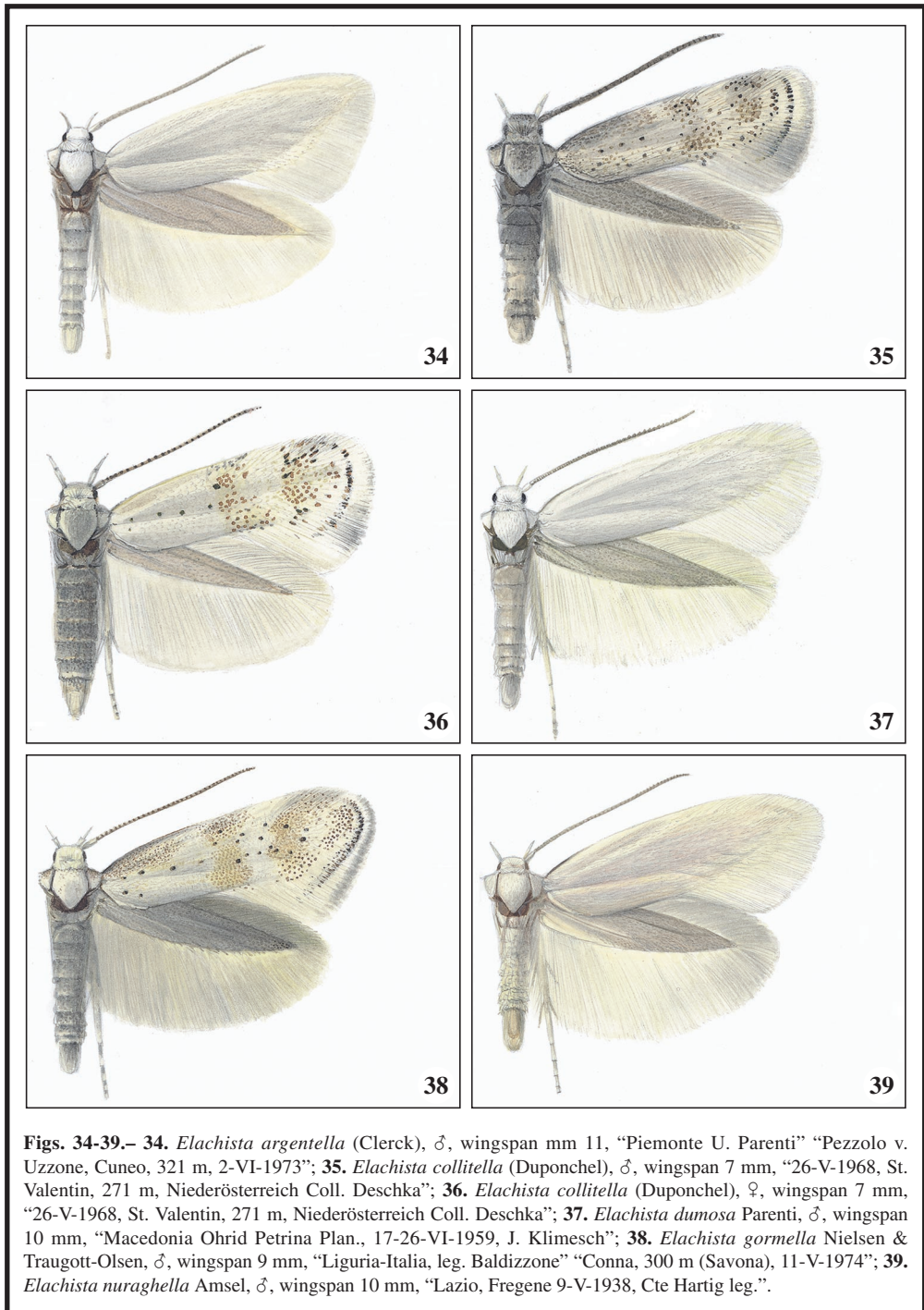


**Figs. 27-29.**— **27.** *Elachista passerini* Traugott-Olsen. “Piemonte-Val Pellice, Bobbio Pellice (Torino), 1700 m, 23-VI-1997, dint. Rifugio Jervis, leg. G. Bassi & G. Del mastro” “gen. slide ♀ N° 13550 U. Parenti”; **28.** *Elachista pollinariella* Zeller. “Italia-Piemonte, Morano sul Po (Alessandria) Banco di Ghiaia grande, 120 m, 23-IV-1994, leg. P. G. Varalda” “gen. slide ♀ N 15659 U. Parenti”; **29.** *Elachista subocellea* (Stephens). “Griechenland Phalakron ??, 1700 m, leg. Gg. Derra” “gen. slide. ♀ N° 11481 U. Parenti”.

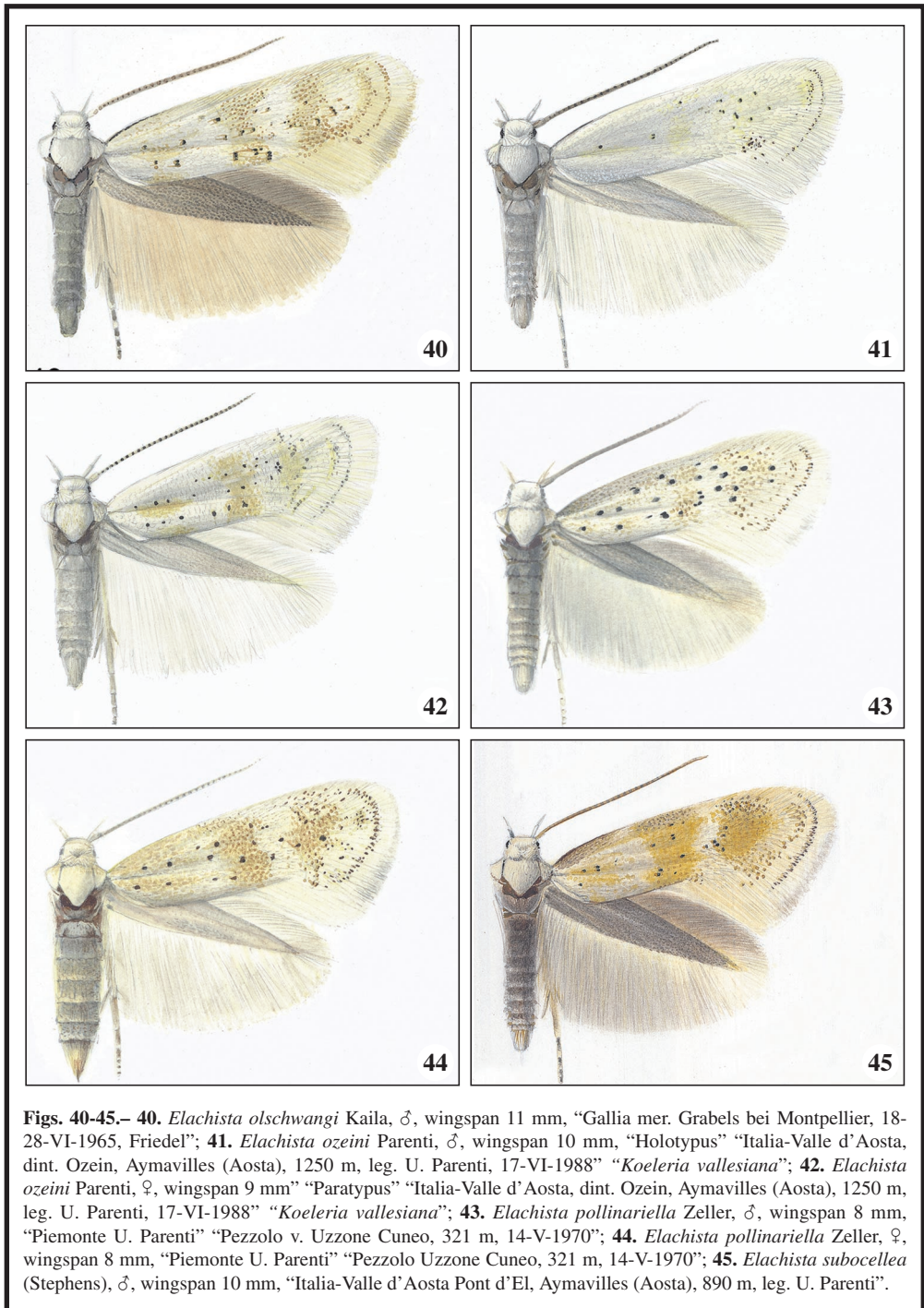


**Fig. 30.**— Sclerified larval plates of: **a, b, c** *Elachista pollinariella* Zeller; **d, e, f** *Elachista argentella* (Clerck); **g, h, i** *Elachista ozeini* Parenti.





**Figs. 34-39.**— **34.** *Elachista argentella* (Clerck), ♂, wingspan mm 11, “Piemonte U. Parenti” “Pezzolo v. Uzzone, Cuneo, 321 m, 2-VI-1973”; **35.** *Elachista collitella* (Duponchel), ♂, wingspan 7 mm, “26-V-1968, St. Valentin, 271 m, Niederösterreich Coll. Deschka”; **36.** *Elachista collitella* (Duponchel), ♀, wingspan 7 mm, “26-V-1968, St. Valentin, 271 m, Niederösterreich Coll. Deschka”; **37.** *Elachista dumosa* Parenti, ♂, wingspan 10 mm, “Macedonia Ohrid Petrina Plan., 17-26-VI-1959, J. Klimesch”; **38.** *Elachista gormella* Nielsen & Traugott-Olsen, ♂, wingspan 9 mm, “Liguria-Italia, leg. Baldizzone” “Conna, 300 m (Savona), 11-V-1974”; **39.** *Elachista nuraghella* Amsel, ♂, wingspan 10 mm, “Lazio, Fregene 9-V-1938, Cte Hartig leg.”.



**Figs. 40-45.**— **40.** *Elachista olschwangi* Kaila, ♂, wingspan 11 mm, “Gallia mer. Grabels bei Montpellier, 18-28-VI-1965, Friedel”; **41.** *Elachista ozeini* Parenti, ♂, wingspan 10 mm, “Holotypus” “Italia-Valle d’Aosta, dint. Ozein, Aymavilles (Aosta), 1250 m, leg. U. Parenti, 17-VI-1988” “*Koeleria vallesiana*”; **42.** *Elachista ozeini* Parenti, ♀, wingspan 9 mm” “Paratypus” “Italia-Valle d’Aosta, dint. Ozein, Aymavilles (Aosta), 1250 m, leg. U. Parenti, 17-VI-1988” “*Koeleria vallesiana*”; **43.** *Elachista pollinariella* Zeller, ♂, wingspan 8 mm, “Piemonte U. Parenti” “Pezzolo v. Uzzone Cuneo, 321 m, 14-V-1970”; **44.** *Elachista pollinariella* Zeller, ♀, wingspan 8 mm, “Piemonte U. Parenti” “Pezzolo Uzzone Cuneo, 321 m, 14-V-1970”; **45.** *Elachista subocellea* (Stephens), ♂, wingspan 10 mm, “Italia-Valle d’Aosta Pont d’El, Aymavilles (Aosta), 890 m, leg. U. Parenti”.