

New records of Aulacigastridae and Drosophilidae (Diptera) from Switzerland, Italy, and Greece

Autor(en): **Bächli, Gerhard / Papp, László / Vanin, Stefano**

Objektyp: **Article**

Zeitschrift: **Mitteilungen der Schweizerischen Entomologischen Gesellschaft = Bulletin de la Société Entomologique Suisse = Journal of the Swiss Entomological Society**

Band (Jahr): **72 (1999)**

Heft 1-2

PDF erstellt am: **24.07.2024**

Persistenter Link: <https://doi.org/10.5169/seals-402746>

Nutzungsbedingungen

Die ETH-Bibliothek ist Anbieterin der digitalisierten Zeitschriften. Sie besitzt keine Urheberrechte an den Inhalten der Zeitschriften. Die Rechte liegen in der Regel bei den Herausgebern.

Die auf der Plattform e-periodica veröffentlichten Dokumente stehen für nicht-kommerzielle Zwecke in Lehre und Forschung sowie für die private Nutzung frei zur Verfügung. Einzelne Dateien oder Ausdrucke aus diesem Angebot können zusammen mit diesen Nutzungsbedingungen und den korrekten Herkunftsbezeichnungen weitergegeben werden.

Das Veröffentlichen von Bildern in Print- und Online-Publikationen ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. Die systematische Speicherung von Teilen des elektronischen Angebots auf anderen Servern bedarf ebenfalls des schriftlichen Einverständnisses der Rechteinhaber.

Haftungsausschluss

Alle Angaben erfolgen ohne Gewähr für Vollständigkeit oder Richtigkeit. Es wird keine Haftung übernommen für Schäden durch die Verwendung von Informationen aus diesem Online-Angebot oder durch das Fehlen von Informationen. Dies gilt auch für Inhalte Dritter, die über dieses Angebot zugänglich sind.

New records of Aulacigastridae and Drosophilidae (Diptera) from Switzerland, Italy, and Greece

GERHARD BÄCHLI¹, LÁSZLÓ PAPP² & STEFANO VANIN³

¹ Zoological Museum of the Universität Zürich, Zürich-Irchel Winterthurerstrasse 190, CH-8057 Zürich, Switzerland

² Department of Zoology, Hungarian Natural History Museum, H-1088 Budapest, Baross u. 13, Hungary

³ c/o Laboratory of Entomology, Museo Civico di Storia Naturale, Fontego dei Turchi, S. Croce 1730, Venezia, I-30135, Italy

Aulacigaster falcata L. PAPP is new to Switzerland, Italy and Greece, *A. neoleucopeza* MATHIS et FREIDBERG is new to Switzerland. This is the first record of Aulacigastridae from Greece. *Chymomyza amoena* (LOEW) is new for the fauna of Italy. Specimens of *Drosophila nitens* BUZZATI-TRAVERSO (now *Scaptodrosophila*) were collected in Italy in order to select a neotype.

Keywords: Aulacigastridae, Drosophilidae, new records, Switzerland, Italy, Greece

INTRODUCTION

Both the check lists of the dipterous fauna of Italy and Switzerland were published rather recently (e.g., BÄCHLI *et al.*, 1995; BÄCHLI, 1998). This kind of publications facilitates faunistical and taxonomical studies, and at least partly this is the reason, why we make our new records available in this short paper.

In a first report on Aulacigastridae from Switzerland (BÄCHLI, 1997), only *Aulacigaster leucopeza* was mentioned; this information was also included in the Swiss Diptera Checklist (BÄCHLI, 1998). When the new key for the European Aulacigastridae (PAPP, 1998) was available, the main Swiss collections were checked again and, as we show below, all three known European species were found. To give some data about their sympatric occurrence, also the records of *A. leucopeza* in Switzerland are listed.

MATERIAL

The following abbreviations for collections are used: ETHZ, Entomological collection of the Federal Institute of Technology, Zürich; HNHM, Hungarian Natural History Museum, Budapest; MHNG, Muséum d'histoire naturelle, Genève; CBM, private collection of Bernhard MERZ, Genève; CGB, private collection of Gerhard BÄCHLI, Zürich.

In the following list, the Swiss records are alphabetically arranged, and canton, locality, date, collector, specimens, and collection are mentioned. The Swiss cantons are abbreviated as follows: **AG**, Aargau; **BE**, Bern; **GE**, Genève; **GL**, Glarus; **GR**, Graubünden; **JU**, Jura; **NE**, Neuchâtel; **SG**, St. Gallen; **TI**, Ticino; **UR**, Uri; **VD**, Vaud; **VS**, Valais; **ZH**, Zürich.

For the determination, mainly color characters of external morphology were used, which sometimes proved to be variable and therefore ambiguous. An asterisk (*) indicates that the determination was confirmed by a preparation of male genitalia.

FAUNISTICS

Family Aulacigastridae

Specimens of *Aulacigaster* are usually collected at sap runs of deciduous trees (PAPP, 1998). All specimens collected by B. MERZ were found on bleeding elm and asp trees, where only one species was found at a time, except in a case where at a bleeding tree trunk *A. leucopeza* and *A. neoleucopeza* were found together (B. MERZ, pers. comm.). It is very interesting that the bulk of specimens is sampled by beer/wine traps (cf. ALLEMAND *et al.*, 1991), in which very often up to three species are included. This kind of trap is, therefore, not selective, but very effective. A small number only was found using fruit baits for collecting drosophilids.

***Aulacigaster falcata* L. PAPP, 1998**

Switzerland: **GE:** Avully, VI.–VII.1995, BESUCHET, 4 ♀♀ (MHNG), VIII.–IX.1995, BESUCHET, 1 ♂ (CGB); Buchillon, VII.–IX.1997, BESUCHET, 2 ♀♀ (CGB); Charrot, V.–VI.1995, BESUCHET, 1 ♂ (CGB); Ecogia, VII.–VIII.1995, BESUCHET, 1 ♂(*) (CGB); Gy, VI.–VII.1995, BESUCHET, 3 ♀♀ (MHNG, CBM, CGB); Merlinge, VIII.1995, BESUCHET, 1 ♀ (CGB); Présinge, VI.–VII.1996, BESUCHET, 2 ♂♂, 3 ♀♀ (MHNG, CGB); **TI:** Gordola, 16.–20.V.1995, MERZ & BÄCHLI, 3 ♂♂, 6 ♀♀ (CGB); Someo, 25.–29.7.1997, BÄCHLI, 1 ♀ (CGB); **VD:** Duillier, VI.–VII.1995, BESUCHET, 1 ♀ (MHNG); **VS:** Finges, VI.–VII.1995, Besuchet, 1 ♂(*); 7 ♀♀ (MHNG, CBM, CGB); VII.–VIII.1995, BESUCHET, 1 ♂(*); 4 ♀♀ (MHNG, CBM); Pfywald, 19.7.–7.8.1993, BÄCHLI, 6 ♂♂(1*), 4 ♀♀ (CGB); Sion, VI.–IX.1997, BESUCHET, 2 ♀♀ (CGB); Visp, 13.–15.VIII.1993, BÄCHLI, 1 ♀ (CGB); **ZH:** Dietikon, 12.VIII.–7.IX.1992, BÄCHLI, 2 ♂♂, 8 ♀♀ (CGB), 16.V.–3.VI.1995, BÄCHLI, 5 ♀♀ (CGB), 15.–29.VI.1996, BÄCHLI, 3 ♀♀ (CGB), 24.V.–12.VI.1997, BÄCHLI, 5 ♀♀ (CGB), 2.–22.VIII.1997, BÄCHLI, 3 ♀♀ (CGB), 23.V.–12.VI.1998, BÄCHLI, 2 ♀♀ (CGB), 13.VI.–4.VII.1998, BÄCHLI, 1 ♂, 3 ♀♀ (CGB), 6.–27.VII.1998, BÄCHLI, 7 ♂♂, 10 ♀♀ (ETHZ, CGB), 29.VII.–15.VIII.1998, BÄCHLI, 3 ♀♀ (CGB).

Italy: Veneto: Treviso, Villa Margherita, 21.V.1998, oak sap, VANIN, 1 ♀ (HNHM).

Greece: Korfu, Akharavi, nedves ny-rfacsonk [oozing knag of a poplar tree], 3.–10.VII.1998, SZAPANOS, 3 ♂♂, 1 ♀ (HNHM).

The species is new to Switzerland and Italy and this is the first record of the family Aulacigastridae from Greece (cf. PAPP, 1984). Nearly all Swiss specimens were collected by beer/wine traps. It is the rarest *Aulacigaster* species in this kind of traps.

***Aulacigaster leucopeza* MEIGEN, 1830**

Switzerland: **AG:** Heitersberg, 20.–29.VII.1984, JUNGEN, 1 ♂, 1 ♀ (CGB); Würenlingen, 6.–11.VI.1973, BÄCHLI, 1 ♀ (CGB); **BE:** Biel, 27.–31.VII.1973, BÄCHLI, 1 ♂, 3 ♀♀ (CGB); Brienz, VI.1996, BESUCHET, 6 ♂♂, 6 ♀♀ (CGB); **GE:** Avully, VI.–VII.1995, BESUCHET, 3 ♀♀ (MHNG); Ecogia, V.–VII.1995, BESUCHET, 1 ♀ (MHNG); La Louvière, V.–VI.1995, BESUCHET, 1 ♂, 1 ♀ (MHNG); Présinge, VI.–VII.1996, BESUCHET, 1 ♂, 7 ♀♀ (CGB); Sézenove, VI.–VII.1995, BESUCHET, 1 ♂, 2 ♀♀ (MHNG, CGB); **GL:** Vorauen, 20.VII.–8.VIII.1995, BÄCHLI, 1 ♂, 2 ♀♀ (CGB); **GR:** Ramosch, V.–VI.1995, BESUCHET, 1 ♀ (MHNG); **JU:** Delémont, 2.–6.VIII.1974, BÄCHLI, 3 ♂♂, 5 ♀♀ (CGB); **NE:** Rochefort, 5.–8.VII.1982, BÄCHLI, 2 ♀♀ (CGB); **SG:** Rheineck, 14.–17.VIII.1973, BÄCHLI, 5 ♂♂, 3 ♀♀ (CGB); **TI:** Angone/Anzonico 21.–31.VIII.1981, BÄCHLI, 1 ♀ (CGB); Bellinzona 26.–30.VIII.1981,

BÄCHLI, 1 ♂ (CGB); Cevio 10.–11.IX.1991, BÄCHLI, 1 ♂ (CGB); Faido, 24.–31.VIII.1981, BÄCHLI, 3 ♂♂, 5 ♀♀ (CGB); Lodano, 10.–11.IX.1991, BÄCHLI, 2 ♂♂, 3 ♀♀ (CGB); Maggia, 10.–12.IX.1991, BÄCHLI, 2 ♂♂ (CGB); **UR**: Seelisberg, 4.–7.VIII.1973, BÄCHLI, 2 ♂♂ (CGB); **VD**: Duillier, VI.–VII.1995, BESUCHET, 1 ♀ (MHNG), VII.–VIII.1995, BESUCHET, 1 ♀ (MHNG); **VS**: Finges VI.–VII.1995, BESUCHET, 1 ♂, 2 ♀♀ (MHNG); VII.–VIII.1995, BESUCHET, 1 ♂, 1 ♀ (MHNG, CGB); Gampel, VI.–VII.1996, BESUCHET, 1 ♀ (MHNG), VII.–VIII.1996, BESUCHET, 1 ♀ (CGB); Pfynwald, 19.VI.–7.VIII.1993, BÄCHLI, 1 ♂, 6 ♀♀ (CGB); Sion, VI.–IX.1997, Besuchet, 2 ♀♀ (CGB); Visp, 9.–11.VIII.1993, Bächli, 3 ♂♂, 4 ♀♀ (CGB), 13.–15.VIII.1993, BÄCHLI, 2 ♂♂, 2 ♀♀ (CGB), VI.–VII.1996, BESUCHET, 1 ♂, 3 ♀♀ (MHNG, CGB); **ZH**: Dietikon, V.1974, BÄCHLI, 2 ♀♀ (CGB), 14.–19.VII.1988, BÄCHLI, 1 ♀ (CGB), 11.–21.VII.1992, BÄCHLI, 3 ♂♂, 3 ♀♀ (CGB), 12.VIII.–7.IX.1992, BÄCHLI, 13 ♂♂, 11 ♀♀ (CGB), 16.V.–3.VI.1995, BÄCHLI, 16 ♂♂, 22 ♀♀ (CGB), 15.–29.VI.1996, BÄCHLI, 6 ♀♀ (CGB), 25.VII.–12.VIII.1996, BÄCHLI, 1 ♂, 1 ♀ (CGB), 24.V.–12.VI.1997, BÄCHLI, 8 ♂♂, 18 ♀♀ (CGB), 26.VI.–21.VII.1997, BÄCHLI, 1 ♀ (CGB), 2.–22.VIII.1997, BÄCHLI, 9 ♂♂, 3 ♀♀ (CGB), 23.V.–12.VI.1998, BÄCHLI, 3 ♂♂, 7 ♀♀ (CGB), 13.VI.–4.VII.1998, BÄCHLI, 2 ♂♂, 2 ♀♀ (CGB), 6.–27.VII.1998, BÄCHLI, 5 ♂♂, 4 ♀♀ (CGB), 29.VII.–15.VIII.1998, BÄCHLI, 1 ♂ (CGB); Embrach-Haumühle, 10.VII.1997, MERZ, 1 ♂ (ETHZ); Flaach, 4.–22.VII.1996, BÄCHLI, 4 ♂♂, 5 ♀♀ (CGB); Sihlbrugg, 28.IV.1998, RÜEGG, 1 ♂ (ETHZ); Zürich-Albisgütli, 27.VI.1996, MERZ, 1 ♂, 1 ♀ (ETHZ, CBM); Zürich-Allmend, 1.III.1995, MERZ, 1 ♂(*) (CBM), 11.VII.1995, MERZ, 1 ♂, 1 ♀ (CBM), 17.VI.1996, MERZ, 3 ♂♂ (ETHZ); Zürich-Hönggerberg, 19.–23.VII.1990, BÄCHLI, 1 ♂ (CGB), 22.–31.VIII.1991, BÄCHLI, 1 ♀ (CGB), 24.III.1996, MERZ, 1 ♂(*) (CBM); Zürich-Käferberg, 12.–15.VII.1987, GOSTELI, 1 ♀ (CGB); Zürich-Waldgarten, 9.VII.1997, MERZ, 2 ♂♂ (CBM); Zürich-Zürichberg, 5.VIII.1995, MERZ, 4 ♂♂ (CBM), 28.VI.1996, MERZ, 2 ♂♂ (ETHZ), 23.VII.1996, MERZ, 1 ♂ (ETHZ), 23.VII.1997, MERZ, 1 ♂, 1 ♀ (ETHZ), 12.V.1998, MERZ, 27 ♂♂(1*), 2 ♀♀ (ETHZ, CBM).

This species was recorded by BÄCHLI (1987) in Switzerland for the first time; however, due to possible misidentifications, most of the specimens were checked again, and verified records are given here. Large numbers of flies were collected by beer/wine traps.

Aulacigaster neoleucopeza MATHIS et FREIDBERG, 1994

Switzerland: **BE**: Brienz, VI.1996, BESUCHET, 1 ♂ (CGB); **GE**: Charrot, VII.–VIII.1995, BESUCHET, 1 ♂ (CGB); Ecogia, V.–VII.1995, BESUCHET, 1 ♀ (MHNG); Gy, VI.–VII.1995, BESUCHET, 2 ♀♀ (MHNG); La Louvière, V.–VI.1995, BESUCHET, 1 ♀ (MHNG), VII.–VIII.1995, BESUCHET, 1 ♀ (CGB); Présinge, V.–VI.1996, BESUCHET, 1 ♂ (CGB), VI.–VII.1996, BESUCHET, 1 ♂ (CGB); Sézenove, VI.–VII.1995, BESUCHET, 1 ♀ (CBM); **VD**: Buchillon, VII.–IX.1997, BESUCHET, 3 ♂♂, 2 ♀♀ (CGB); Duillier, VI.–VII.1995, BESUCHET, 1 ♀ (MHNG), VII.–VIII.1995, BESUCHET, 2 ♂♂(1*) (CBM, CGB); **VS**: Visp, VI.–VII.1996, BESUCHET, 2 ♂♂, 4 ♀♀ (MHNG, CBM, CGB); **ZH**: Dietikon, 4.–9.III.1990, BÄCHLI, 1 ♀ (HNHM) 19.–23.VII.1990, Bächli, 1 ♀ (CGB), 11.–21.VII.1992, BÄCHLI, 1 ♂ (CGB), 12.VIII.–7.IX.1992, BÄCHLI, 76 ♂♂, 65 ♀♀ (ETHZ, CBM, CGB), 16.V.–3.VI.1995, BÄCHLI, 6 ♂♂, 4 ♀♀ (CGB), 15.–29.VI.1996, BÄCHLI, 3 ♂♂, 8 ♀♀ (CGB), 25.VII.–12.VIII.1996, BÄCHLI, 4 ♂♂ (CGB), 24.V.–12.VI.1997, BÄCHLI, 6 ♂♂, 7 ♀♀ (CGB), 26.VI.–21.VII.1997, BÄCHLI, 5 ♂♂, 3 ♀♀ (CGB), 2.–22.VIII.1997, BÄCHLI, 9 ♂♂, 6 ♀♀ (CGB), 23.V.–12.VI.1998, BÄCHLI, 1 ♂, 4 ♀♀ (CGB), 13.VI.–4.VII.1998, BÄCHLI, 5 ♂♂, 9 ♀♀ (CGB), 6.–27.VII.1998, BÄCHLI, 9 ♂♂, 10 ♀♀ (CGB), 29.VII.–15.VIII.1998, BÄCHLI, 1 ♂, 4 ♀♀ (CGB); Flaach, 4.–22.VII.1996, BÄCHLI, 2 ♂♂, 9 ♀♀ (CGB); Freienstein, 21.VII.–12.VIII.1982, WIEDEMEIER, 1 ♀ (CGB); Zürich, 1.V.1996, BÄCHLI, 1 ♀ (CGB); Zürich-Hönggerberg, 4.–8.IX.1988, BÄCHLI, 1 ♂(*), 3 ♀♀ (CGB), 19.–23.VII.1990, BÄCHLI, 1 ♂, 1 ♀ (CGB), 18.–22.VII.1991, BÄCHLI, 1 ♀ (CGB), 24.III.1996, MERZ, 1 ♂ (CBM)

New for the fauna of Switzerland (cf. BÄCHLI, 1998). It is a very important record, since in the Palaearctic region this species was formerly known from Hungary only, and there “found within a circle of c. 50 km radius” (PAPP, 1998). This species was, again, mainly collected by beer/wine traps. Widespread in the Nearctic region.

Family Drosophilidae

***Chymomyza amoena* (LOEW, 1863)**

Italy: Veneto: Cessalto (prov. Treviso), 17.V.1998, oak sap, VANIN, 1 ♂ (HNHM). New for the fauna of Italy (cf. BÄCHLI *et al.*, 1995).

***Scaptodrosophila deflexa* (DUDA, 1924)**

Italy: Veneto: Treviso, Villa Margherita, 21.V.1998, oak sap, VANIN, 2 ♂♂ (HNHM). Known already from Italy (BÄCHLI *et al.*, 1995) but rarely seizable.

***Scaptodrosophila nitens* (BUZZATI-TRAVERSO, 1943)**

Italy: Veneto: Treviso, Villa Margherita, 11.VI.1998, oak sap, VANIN, 3 ♂♂ (incl. neotype, see PAPP *et al.*, 1999) (HNHM); 21.VI.1998, oak sap, VANIN, 1 ♂ (HNHM).

ACKNOWLEDGMENTS

We express our thanks to Dr. Claude BESUCHET, Genève, for making available the Diptera collected by him in beer/wine traps, and to Dr. Andreas MÜLLER, for the loan of specimens of the ETHZ collection.

REFERENCES

- ALLEMAND, R. & ABERLENC, H.-P. 1991. Une méthode efficace d'échantillonnage de l'entomofaune des frondaisons: le piège attractif aérien. *Mitt. Schweiz. Ent. Ges.* 64: 293–305.
- BÄCHLI, G. 1997. Die Arten der Tanypezidae, Dryomyzidae, Periscelididae, Acartophthalmidae, Aulacigastridae und Stenomicridae in der Schweiz. *Mitt. Ent. Ges. Basel* 46: 29–34.
- BÄCHLI, G. 1998. 83. Aulacigastridae, p. 288. In: MERZ, B., BÄCHLI, G., HAENNI, J.-P. & GONSETH, Y. (eds): *Fauna Helvetica* 1, Diptera – Checklist. CSCF und Schweizerische Entomologische Gesellschaft, 369 pp.
- BÄCHLI, G., CANZONERI, S. & PAPP, L. 1995. Diptera Ephydroidea. In: MINELLI, A., RUFFO, S. & LA POSTA, S. (eds): *Checklist delle specie della fauna italiana*, vol. 76: 1–10. Calderini, Bologna.
- PAPP, L. 1984. Family Aulacigastridae. In: SOÓS, Á. & PAPP, L. (eds): *Catalogue of Palaearctic Diptera*, vol. 10, pp. 60–61. Akadémiai Kiadó, Budapest, 402 pp.
- PAPP, L. 1998. The Palaearctic species of *Aulacigaster* MACQUART (Diptera: Aulacigastridae). *Acta zool. hung.* 43(1997)(3): 225–234.
- PAPP, L., RÁCZ, O. & BÄCHLI, G. 1999. Revision of the European species of the *Scaptodrosophila rufifrons* group (Diptera, Drosophilidae). *Mitt. Schweiz. Ent. Ges.* 72: 105–117.

(received April 20, 1999; accepted May 3, 1999)