First Records of Platypezidae (Diptera) from Mainland Portugal with a First Record for Iberia of the Genus *Paraplatypeza* Kessel & Magioncalda

Martin J. Ebejer¹ & Rui Andrade²

Research Fellow, Entomology Section, Department of Biodiversity & Systematic Biology, National Museum Wales, Cathays Park, Cardiff, CF10 3NP, UK. – martin.ebejer@btinternet.com

² Rua Dr. Abel Varzim 16-2D, 4750-253 Barcelos, Portugal. – ruiamandrade@yahoo.com

There are no records known to us of Platypezidae from mainland Portugal, but there is one species *Callomyia dives* (Zetterstedt, 1838) recorded from Madeira (Chandler, 1974). The Mediterranean region is inadequately studied with regard to species distribution, composition, diversity and ecology of Diptera in general and the Platypezidae are probably even less well-known.

The Platypezidae are fungivorous insects in their larval stages and mainly inhabit damp forests where fungi are likely to thrive. The Iberian Peninsula still has large tracts of forest and 20 species of Platypezidae in eight genera are known from there (Carles-Tolrá & Báez, 2002; Rocabruna et al., 2005). In this article, we give the first records from mainland Portugal. The number of specimens is small (39), yet these comprise of ten species in seven genera. The genus Paraplatypeza Kessel & Magioncalda, 1968 is new to Iberia. Platypezina Wahlgren, 1910 and Platypeza Meigen, 1803 (Platypezinae) should eventually be found in Portugal as they are widespread species that are already known from Spain (Carles-Tolrá & Báez, 2002).

Notes on the habitats

All the material listed in this article was collected by one of the authors (R. Andrade) in the North of Portugal. The specimens were identified by M. Ebejer using Chandler (2001). It is preserved in alcohol and deposited in his private collection, unless otherwise indicated in the data following each species.

In Avintes (41° 5'55.49"N, 8°33'28.63"W), sampling using water traps, and by hand collecting, was made in the Parque Biológico de Gaia, a park in the outskirts of the city of Vila Nova de Gaia. It consists of around 35 hectares, through which flows the small river Febros, a tributary of the Douro river. The landscape was significantly altered in the past for agriculture and other human development. Included among many tree species are the following: *Quercus robur*, *Salix atrocinerea*, *Populus nigra* and *Alnus glutinosa*. The shrubs *Rubus* sp., *Sambucus nigra*, and others are common.

Parque Municipal da Lavandeira, in Oliveira do Douro (41° 7'17.59"N, 8°35'40.90"W), is a city park of 11 hectares created for recreational purposes. It has large areas set to lawn. A small stream crosses the park, along the banks of which grow *Salix atrocinerea*, *Sambucus nigra*, *Laurus nobilis*, *Rubus* sp. and various ornamental species.

Jardim Soares dos Reis, in the parish of Mafamude (41° 7'22.99"N, 8°36'42.78"W), is a small green space with lawns and ornamental shrubs found in the heart of an urban environment. Some tree species like *Populus* sp., *Malus* sp, and other exotic trees also occur there.

In Campo (41°10'40.37"N, 8°28'54.01"W), a small mountainous location, Platypezidae specimens were collected from the banks of water courses where *Salix* sp. and *Quercus robur*, and numerous smaller plants like *Rumex* sp., *Plantago* sp., *Rubus* sp. and various umbelliferous plants were growing.

The site in the parish of Canelas (40°43'1.48"N, 8°34'31. 66"W) is a cattle pasture adjacent to a marshland. Around the fields are trees and bushes, mainly of Salix atrocinerea, Alnus glutinosa, Rubus sp. and Frangula alnus, around which the specimens were collected.

The Gilmonde parish (41°30'24.45"N, 8°39'16.51"W) is composed of many agricultural fields surrounded by small patches of forest composed mainly of *Eucalyptus* sp., *Quercus robur*, *Pinus pinaster*, *Frangula alnus* and *Salix atrocinerea*. The undergrowth supports a number of smaller plants like *Lonicera* sp., *Hedera* sp. and *Rubus* sp.

The single specimen of Platypezidae from Apúlia (41°28' 41.07"N, 8°46'29.54"W) was swept from around a small isolated specimen of *Pinus pinaster* growing on dunes. The dunes in Apúlia belong to the Esposende coastal protected area, on which the following common plant species can be found: *Ammophila arenaria*, *Calystegia soldanella*, *Carpobrotus edulis*, *Euphorbia paralias*, *Helichrysum* spp. and *Pancratium maritimum*.

Microsaniinae

 Microsania meridionalis Collart, 1960: 13, Apúlia, Esposende, 23.vii.2010.

Callomyiinae

- Agathomyia antennata (Zettersedt, 1819): 1♂, Avintes, V. N. Gaia, 24.ix.2009; 1♂, Avintes, V. N. Gaia, 15.x.2009.
- Callomyia speciosa Meigen, 1804: 4♂♂4♀♀, Gilmonde, Barcelos, 26.iv.2010.

Platypezinae

- Lindneromyia dorsalis (Meigen, 1804): 1♀, Avintes, V. N. Gaia, 15.x.2009; 3♂3♀♀, Oliveira do Douro, V. N. Gaia, 29.ix.2009; 1♀, Campo, Valongo, 30.viii.2010; 1♀, Canelas, Estarreja, 19.ix.2010; 1♀, Avintes, V. N. Gaia, 27.ix.2010.
- Lindneromyia hungarica Chandler, 2001: 1♀, Oliveira do Douro,
 V. N. Gaia, 29.ix.2009; 4♀♀, Mafamude, V. N. Gaia, 15.ix.2010;
 1♀, Canelas, Estarreja, 19.ix.2010.
- Paraplatypeza atra (Meigen, 1804): 1♀, Oliveira do Douro, V. N. Gaia, 1.vii.2009; 1♀, Avintes, V. N. Gaia, 24.ix.2009; 1♂, Campo, Valongo, 17.v.2010.
- Polyporivora ornata (Meigen, 1838): 1♂, Oliveira do Douro, V. N. Gaia, 8.ix.2009; 1♀, Campo, Valongo, 4.iii.2010.
- Polyporivora picta (Meigen, 1830): 1♂1♀, Oliveira do Douro, V. N. Gaia, 30.x.2009.
- Protoclythia modesta (Zetterstedt, 1844): 1♂, Oliveira do Douro, V. N. Gaia, 30.x.2009.
- Protoclythia rufa (Meigen, 1830): 1♂, Oliveira do Douro, V. N. Gaia, 30.x.2009; 3♂♂, Avintes, V. N. Gaia, 15-17.x.2010, (two specimens in MJE coll.).

Acknowledgments

The authors wish to thank Parque Biológico de Gaia E. E. M. and Ecoinside for sponsoring the work during which most of the specimens were collected.

References: CARLES-TOLRÁ, M. & M. BÁEZ 2002. Platypezidae p.131. In Carles-Tolrá Hjorth-Andersen, M. (coord.): Catálogo de los Diptera de España, Portugal y Andorra (Insecta). Monografias S.E.A. Volume 8. Sociedad Entomológica Aragonesa, Zaragoza. 323 pp. ● CHANDLER, P.J. 1974. Additions and corrections to the British List of Platypezidae (Diptera) incorporating a revision of the Palaearctic species of Callomyia Meigen. Proceedings of the British Entomological and Natural History Society, 7(1): 1-32. ● CHANDLER, P.J. 2001. The Flat-footed Flies (Diptera: Opetiidae and Platypezidae) of Europe. Fauna Entomologica scandinavica 36. Brill, Leiden, 276 pp. ● ROCABRUNA, A., J. I. PUJADE-VILLAR & M. TABARES 2005. Recol.lecció a Catalunya de Ganoderma applanatum amb cecidis d'Agathomyia wankowiczii (Schnabl, 1884). Revista Catalana de Micologia, 27: 89-92.