



Taxonomic note on *Scythris pangalactis* Meyrick 1933, with the description of a new species from Iran and a new synonymy (Lepidoptera, Gelechioidea, Scythrididae)

PIETRO PASSERIN D'ENTRÈVES¹, BENGT Å. BENGTTSSON² & ANGELA ROGGERO^{1,3}

¹Department of Life Sciences and Systems Biology, University of Torino, Via Accademia Albertina 13, I-10123 Torino, Italy.

E-mail: angela.roggero@unito.it, pietro.passerin@unito.it

²Lokegatan 3, S-386 93 Färjestaden, Sweden. E-mail: bengt.a.bengtsson@gmail.com

³Corresponding author

Abstract

The taxonomic position of *Scythris pangalactis* and its synonymy with *S. pelinaula* is discussed. A new species is described from SE Iran, *S. tridentata* Passerin d'Entrèves & Roggero **sp. nov.** The *S. tridentata* species-group is established with the re-description of *S. pelinaula*. A lectotype for *S. pangalactis* is selected.

Key words: Genitalia, Saharo-Sindic distribution, *Scythris pelinaula*, *Scythris tridentata*

Introduction

Some Scythrididae, mainly Afrotropical species described in the first half of 20th century, require a comprehensive revision to confirm their taxonomic status. Modern scythridid taxonomy is based extensively on genital morphology. However, the genital features of many species described before the advent of genitalia study remain unknown (Passerin d'Entrèves & Roggero 2007), leaving open various taxonomic questions. For example, newly described species are found to be synonymous with older nominal species once the genitalia are examined. Furthermore, some species have been described multiple times in a short period (Bengtsson 1997b; Passerin d'Entrèves & Roggero 2007). Although DNA barcoding is a powerful tool to resolve such taxonomic problems (e.g. in Lepidoptera: Hulcr *et al.* 2007; Hausmann *et al.* 2009; Lees *et al.* 2010), this method of species identification (Ratnasingham & Hebert 2007; Ebach 2011; Jinbo *et al.* 2011; Mitchell 2011) cannot be used routinely to solve taxonomic problems in the Scythrididae because molecular analysis of type specimens may not be allowed, or critical material is too old.

The status of *Scythris pangalactis* Meyrick, 1933 requires re-examination. Meyrick described the species based on two specimens from Al Fashir, Dar Fur (SE Sudan) and preserved in the Natural History Museum of London (BMNH). Both syntypes are females, although Meyrick incorrectly stated one to be a male.

Reporting on the results of a collecting expedition in northeastern Africa, Kasy (1967) described and illustrated the male genitalia of a *Scythris* specimen from Khor Musa Pasha, south of Wadi Halfa, in northern Sudan near the Egyptian border. He suggested that it could be *S. pangalactis*, based on an examination of the syntypes of *S. pangalactis* made by K. Sattler at the BMNH and communicated to him. However, Kasy remained unconvinced of their conspecificity. The abdomens of both syntypes were missing and the similarities were in external features only. Kasy preferred to refer to his specimen provisionally as '*Scythris* species 5'. *Scythris pangalactis* has a cream-white external colouration like many other scythridids from the same region. Therefore, confident identification requires examination of the genitalia.

Bengtsson (2002a, b) described *S. pangalactis* as a highly variable species with a wide distribution covering Gambia, Botswana, Sudan, Yemen, Oman, Iran, and India. Bengtsson (1997a, 2002a) identified the unnamed Kasy specimen as *S. pangalactis* without further explanation. He also reported that Kasy's (1967) 'species 6' was the