



The genus *Picris* (Asteraceae) in southern Italy: contribution to its systematic knowledge

GIOVANNI ASTUTI*, FRANCESCO ROMA-MARZIO & LORENZO PERUZZI

Dipartimento di Biologia, Unità di Botanica, Università di Pisa, Via Luca Ghini 13, 56126, Pisa, Italy

*author for correspondence; e-mail: gastuti@biologia.unipi.it

Abstract

In southern Italy two species of *Picris* occur: the widespread *P. hieracioides* subsp. *hieracioides* and the endemic *P. scaberrima*. The latter is still lacking any karyological knowledge, it is imperfectly known as concerns cypselae morphology and its name requires typification. Thus, the name *Picris scaberrima* is here lectotypified and a map summarizing its distribution is presented. In addition, new data concerning cypselae morphology and karyology of the topotype population of *P. scaberrima* and of a nearly co-occurring population of *P. hieracioides* subsp. *hieracioides* are provided.

Key words: Calabria, cypselae, Gussone, karyotype heterozygosities, karyotype asymmetry, SEM

Introduction

The genus *Picris* Linnaeus (1753: 792) (Asteraceae) includes four species in Italy (Pignatti & Lack 1982, Conti *et al.* 2005). According to recent studies (Slovák *et al.* 2009a-b, 2012) on the infraspecific variation of the generitype *P. hieracioides* Linnaeus (1753: 792), only two subspecies are now recognized within this taxon in Italy: *P. hieracioides* subsp. *hieracioides* and *P. hieracioides* subsp. *umbellata* (Schrank 1789: 334) Ces. in Cattaneo (1844: 303). The other three species are the adventive *P. rhagadioloides* (Linnaeus 1767: 108) Desfontaines (1804: 89), recorded in north-eastern Italy, *P. hispidissima* (Bartling 1825: 125) Koch (1837: 422), an Illyrian species, also occurring in north-eastern Italy, and *P. scaberrima* Guss. in Tenore (1830: 113), a species endemic to southern Italy (Peruzzi *et al.* 2014).

Picris scaberrima was described for the first time by G. Gussone, based on samples collected in Calabria (Tarsia). Conti *et al.* (2005) recorded this species in Calabria, Basilicata and doubtfully in Campania. More recently, Terzi & D'Amico (2009) discovered a population in Apulia, from where the species was actually previously reported by Fiori (1924). According to Pignatti & Lack (1982), *Picris scaberrima* is a scapose hemicryptophyte living on dry uncultivated calcareous grounds, at altitudes of 100–1000 m. Its body is covered by 2–4-barbed glochids (anchor-shaped hairs) and involucre scales of capitula show a peculiar dense and short tomentum. The glochids and basal leaf shape make it clearly distinct from other morphologically similar taxa. This distinction was further confirmed by recent molecular studies (Slovák *et al.* 2014), where *P. scaberrima* is shown to be phylogenetically related to the Irano-Turanian *P. strigosa* Marschall Bieberstein (1808: 250), and both species form a clade sister to the monophyletic *P. hieracioides* species complex within *P. sect. Picris* (Sell 1976). Within that section, Lack (1974) recognised two subsections: *P. Hieracioides* Vassiliev ex Lack (1974: 77; whose correct name should be subsect. *Picris*, Art. 22.1 of the ICN, McNeill *et al.* 2012), including taxa with 2-barbed glochids, and *P. subsect. Strigosae* Vassiliev ex Lack (1974: 77; type species: *P. strigosa*), including taxa with 2–4-barbed glochids. While *P. hieracioides* is obviously belonging to *P. subsect. Picris*, the infrageneric placement of *P. scaberrima* has never been discussed in detail.

Picris scaberrima and *P. hieracioides* subsp. *hieracioides* are the only two taxa occurring in southern Italy and, according to literature (Tenore 1830, Sell 1976, Pignatti & Lack 1982), are easily distinguished by their leaf shape (pinnatisect vs. undivided and dentate, respectively). Only Pignatti & Lack (1982) quoted two further distinguishing features: the occurrence of 4-barbed glochids and the putatively more developed beak of cypselae in *P. scaberrima*.

Concerning the karyology of these two taxa, whereas an extensive literature of karyological studies is available for the diploid *P. hieracioides* s.l. (i.e., for instance Slovák *et al.* 2007 and literature cited therein; Bedini *et al.* 2010 onwards), no chromosome count exists for *P. scaberrima*.