

## A new locality of *Pilosella cymosa* (Asteraceae) in Poland

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**Abstract:** In June 2013, a new locality of nationally vulnerable plant species *Pilosella cymosa* was discovered in the town of Suwałki, NE Poland (the ATPOL cartogram unit FB08). The plant grows on roadside verge and its population consists of several hundred flowering individuals.

**Key words:** *Hieracium cymosum*, *Pilosella cymosa*, distribution, red list, Poland.

### Introduction

*Pilosella cymosa* (L.) F. W. Schultz & Sch. Bip. ( $\equiv$ *Hieracium cymosum* L.) (Asteraceae) is a European-temperate species distributed across the continent except Portugal, Spain, Iceland, Ireland, the United Kingdom, Belgium, and the Netherlands (Bräutigam & Greuter 2007-2009, Zająć & Zająć 2009). It is characteristically found in calcareous xerothermic grasslands of the order *Festucetalia valesiacae*, on heliophilous and thermophilous forest fringes of the alliance *Geranion sanguinei*, and in thermophilous oak forests of the order *Quercetalia pubescenti-petraeae* (Chrtek 2004, Matuszkiewicz 2008).

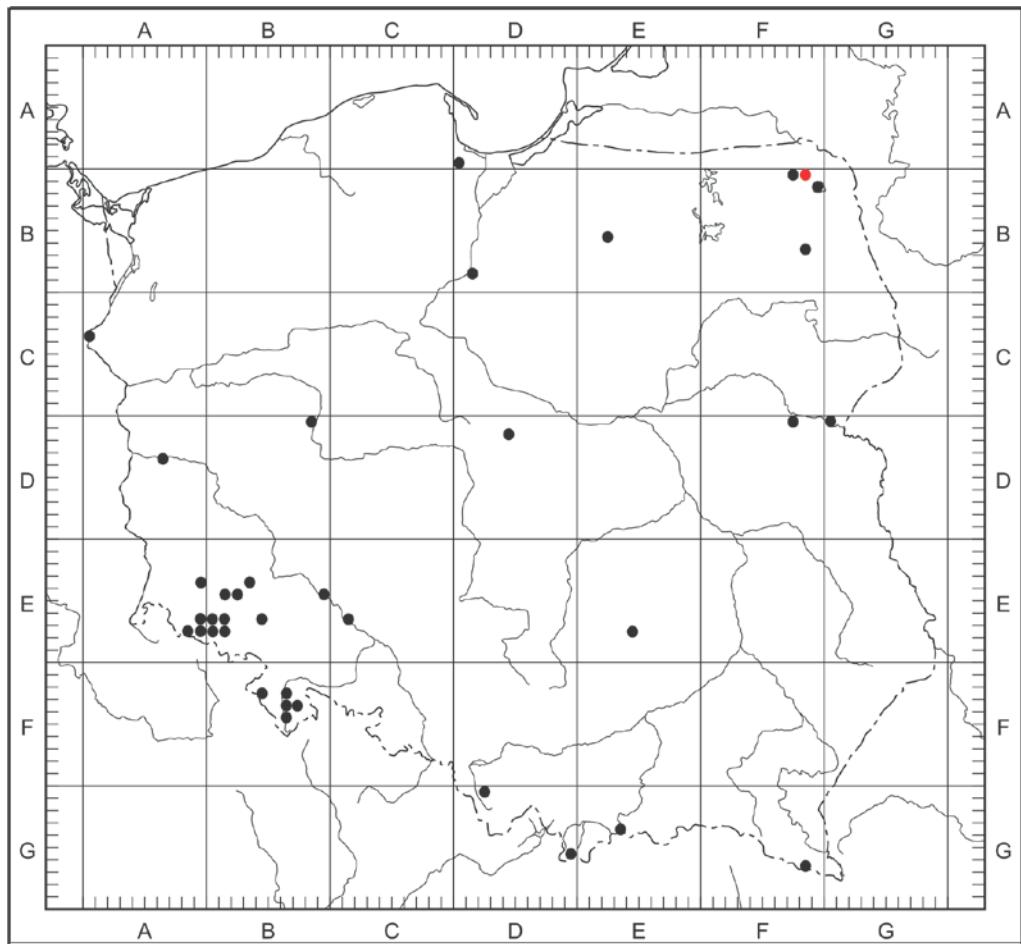
In Poland, *P. cymosa* is treated as *H. cymosum* (Mirek *et al.* 2002, Zająć & Zająć 2009). It is a rare species known from several dozen localities regarding the ATPOL cartogram method (Buliński 2000, Kwiatkowski 2000, 2015, Zająć & Zająć 2001, Smoczyk 2010, Kalinowski 2013, Kurzak *et al.* 2013, Oklejewicz 2013, Pliszko 2014). A large decrease in the number of its localities has been observed in recent decades (Zarzycki *et al.* 2002). It is included in the *Red list of the vascular plants in Poland*, and is classified as a vulnerable species (Zarzycki & Szeląg 2006). In some regions it is ranked higher, for example, in Central Poland as an endangered species (Jakubowska-Gabara & Kucharski 1999) and in Lower Silesia as a critically endangered species (Kącki *et al.* 2003).

### Characteristics of the new locality and population

A new locality of *Pilosella cymosa* was found in 6 June 2013 in the town of Suwałki, NE Poland (GPS coordinates: 54°7'25,8"N, 22°57'3,36"E). According to the ATPOL cartogram method (Zająć 1978) presented site is located within the unit FB08 (Fig. 1). The plant was noticed growing on roadside verge near the junction between Armii Krajowej Street and Prymasa Stefana Wyszyńskiego Street (Fig. 2-3). This open mesic habitat is mainly occupied by plant species typical of meadow communities of the order *Arrhenatheretalia elatioris* (Matuszkiewicz 2008), i.e. *Campanula patula*, *Dactylis glomerata*, *Festuca pratensis*, and *Poa pratensis*. Population of *P. cymosa* consists of several hundred flowering individuals dispersed over an area of about 150 m<sup>2</sup>.

### Discussion

*Pilosella cymosa* is a very rare species in the Suwałki Region as well in north-eastern Poland. It has been reported from Turówka Stara in the Western Suwałki Lakeland (Pliszko 2014) and from Ordów island in the Wigry National Park (Jutrzenka-Trzebiatowski *et al.* 2002). The presence of *P. cymosa* in the town of Suwałki was confirmed in 2014-2015, and



**Fig 1:** Distribution of *Pilosella cymosa* in Poland (the ATPOL cartogram grid of 10 km × 10 km square units): ● – known localities (after Buliński 2000, Kwiatkowski 2000, 2015, Zająć & Zająć 2001, Jutrzenka-Trzebiatowski *et al.* 2002, Smoczyk 2010, Kalinowski 2013, Kurzak *et al.* 2013, Oklejewicz *et al.* 2013, Pliszko 2014); ● – new locality.

after two years from the date of its discovery the size of its population did not significantly change. The vegetation on the roadside verge where *P. cymosa* occurs is regularly mowed, thus the light conditions are stable. A newly discovered population is not currently threatened with extinction, however, it should be monitored.

In Poland, *P. cymosa* is usually found in low numbers (Kwiatkowski 2000, Szeląg 2000, Smoczyk 2010, Kalinowski 2013, Kurzak *et al.* 2013, Oklejewicz *et al.* 2013) in xerothermic grasslands, dry mesic meadows, pastures, oak forests, and on roadside verges. Moreover, as many other closely related species (Křišťálová *et al.* 2010), it thrives in urban areas. The map of distribution included in this paper (Fig. 1) needs to be updated using herbarium data. It should be also mentioned that a new taxonomic treatment of *Hieracium* in Poland is required according to Bräutigam & Greuter (2007).

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**Fig 2:** *Pilosella cymosa* on roadside verge in the town of Suwałki (Photo by A. Pliszko, 6 June 2013).



**Fig 3:** Flowering *Pilosella cymosa* in the town of Suwałki (Photo by A. Pliszko, 6 June 2013).

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