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New data about *Hésperis pýcnotricha* in Romania

Iulian Costache

University of Craiova, Faculty of Horticulture, Department of Biology, 15 Libertăţii Street, 200583 Craiova, Romania.
E-mail: iuliuscostache@yahoo.com, icostache3@gmail.com.

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There are presented new data about *Hésperis pýcnotricha* in Romania. In 2004, the species was first identified in Gura Motrului Locality in Romania. Since then, the species has been pursued and so far, we have come up with new data on its origin and chronology. To our joy, the plant (ornamentally planted) has been identified in the same locality in a backyard adjacent to the first resort. Subsequently, the plant has been identified in other locations such as at the edge of abandoned farms and their premises in Cerna Valcea District; in some local households in Ponoarele Mehedinti District. Travelling in Turkey, at Marmara University in Erasmus, the author had the opportunity to see ornamental plants, inside the yard of Dolmabahçe Palace. Comparing the material collected from Turkey with that from Romania, he realized that both samples have the same morphologically characteristics. From bibliography sources, at the European level (like in Moldova, Slovakia, Turkey in Europe and Ukraine), it is known as a native plant or entered in Krym, Czech Republic, Lithuania and Russian Federation. The species is also known in Sweden while in Lithuania, it is mentioned in the list of invasive plants. The presence of the species in Romania, although was pointed out from 2004, is not consigned at the European level.

Key words: New chronology, *Hésperis pýcnotricha*, Romanian, flora.

INTRODUCTION

From the genus *Hésperis*, there are 13 species mentioned in Europe (Ball, 1993), 9 in the Romanian flora (Nyárády, 1955) and lately, 5 (Ciocârlan, 2000) and 6 species (Ciocârlan, 2009) after including the species *Hésperis pýcnotricha* (Ciocârlan and Costache, 2004). At the European level (Moldova, Slovakia, Turcia in Europe and Ukraine), *Hésperis pýcnotricha* is known as a native plant or entered in Krym, Czech Republic, Lithuania and Russian Federation. This is got from the information given by Euro+Med Preliminary Checklist with Flora Europaea, Med-Checklist and Flora of Macaronesia (http://ww2.bgbm.org/_EuroPlusMed/). *Flora Europaea* (Vol. 2), Ball (1964) mentions *H. pýcnotricha* Borbás and Degen, Magyar Bot. Lapok (1902), within the Matronalis Group (Vol 1:pg 269), considers it a possible subspecies to *Hésperis matronalis* L. He gives U.R.S.S. as the spreading area between longitude 30°E and latitude 56°N, Rs (C, W, K, E). The same author in *Flora Europaea*, the 2nd edition Vol. 1 (1993) gives up the idea of existing subspecies and comes up with new data on the spreading area of the species; thus: C. and S. Russia and S. Ukraina, Tracia, E. Czechoslovakia, Bu, Rs (C, W, Krim., E) Tu. Besides these chronological data given by Flora Europaea, other data about the species come from: Russia (Czerepanov, 1995) and other digital sources (http://www.sevin.ru/natreserves/index); Turkey (Davis et al., 1988), in plant images being posted by Nasip (2007); Marhold and Hindok (1998) published a list with non-vascular and vascular plants from Slovakia in which *Hésperis pýcnotricha* Borbás and Degen [*Hésperis steveniana* Auct., non-DC.] can be found; Herloff (1999) pointed it out in two Swedish localities: 1. a grassy field near an allotment-garden in Goteborg (Gothenburg) in the South-west; 2. in the overgrown garden of an abandoned croft near Linkoping in Ostergotland in the South-east; advancing the invasive character of the species and in 2006 new information about the species appeared online (http://www.bfig.se/foredrag/20060330.html). Ebel (2002) mentioned it in Tomsk Province (located in the Southeastern part of West Siberian Plain); Gudzinskas (2004) included the species in the data base of the invasive terrestrial plants from Lithuania; invasive, being considered also by Pyšek (2009). From Karadag Natural Rezervation, Crimeea (2009) posted species images.
In 2004, from Romania, _Hésperis pýcnotricha_ species was first identified in Gura Motrului locality, Mehedinti District, Oltenia Region (Costache, 2005; Ciocârlan and Costache, 2006). Subsequently, the plant has been identified in other locations: Cerna (Valcea District) in the edge of abandoned farms and its premises; Ponoarele (Mehedinti District) in some local households.

In May 2010, traveling in Turkey, Istanbul, Marmara University, in Erasmus, I had the pleasant surprise to find plants, inside the yard of Dolmabahçe Palace, being ornamental cultivated.

**MATERIALS AND METHODS**

The method used for this research was the observation method. During the research, the identified species were collected along with the collection date, the locality as well as the conditions of the station. Subsequently, the material was examined in details, both rough and preserved, using a binocular magnifying glass. The determinations were established according to the specialized literature found in the bibliography. The detailed images were taken by a digital camera provided with a magnifying device. Coordinates of the localities (FQ 93 - Gura Motrului; FQ 38/48 – Ponoarele; GQ 29/39 - Pojogi-Cerna) was established after Lehrer and Lehrer (1990).

**RESULTS AND DISCUSSIONS**

In the last 5 years, _H. pýcnotricha_ species has been searched in Turkey, and other resorts in Oltenia are also looking for the way to come into the country. The plant has been identified in different locations.

The plant identified in Istanbul, in Dolmabahçe Palace, is ornamental cultivated (Figures 5, 6, 7 and 8). On this occasion, we could compare the material identified in Istanbul with ours collected from Gura Motrului Locality and other stations, noting that it is the same species (Figures 1, 2, 3, and 4). Thus, it requires a representation of the species, knowledge of its morphological characters to identify and distinguish it from the taxon _Hesperis matronalis_.

(Hesperis steveniana auct., non DC.) from Slovakia.

It is a perennial plant (H., V-VII, 2n=14, 26). It has simple stems, sometimes ramified in the upper part of 40-90 (100) cm. The basal leaves (Figure 5) have an oblong-elliptic shape, the middle and upper leaves are ovate ± sessile (Figures 1 and 6), with gently toothed brims. The plant, in the whole, presents indumenta made from bifurcated hairs (the simple and the glandular hairs are missing). It has inflorescence axis and pubescent pedicels (Figure 3), with calyx of 6-8 (9) mm and pubescent (fig. 4). Its petals are 16-18 (19) mm (lamina of almost 10 mm and angle of 6-9 mm), of red colour In Romania, dichotomous key for determining the species is given by Ciocârlan (2009) as:

Ecology: It grows on dark, eu-mesobasical soils; it has heliophyle, mesoxerophyle, subtermophyle-termophyle, poorly neutral acid soil reaction (pH = 6-7); Station: It grows in the margins of agricultural places, Gura Motrului locality, Mehedinti District (Costache, 2005); New localities: It is found in Cerna (Valcea District), Ponoarele
For Station: It grows in the margins of agricultural places, FQ 93 - Gura Motrului locality, Mehedinti District (Costache, 2005).

For New localities: It is found in Pojogi-Cerna - GQ 29/39 - (Valcea District); Ponoarele - FQ 38/48 (Mehedinti District), Oltenia Region (Figure 8).

Conclusion

At this point, the species *Hesperis pycnotricha* data chronology identified in Oltenia, Romania implicitly reveals three stations. The fact that the plant was identified in households and also in uncultivated places entitles us to conclude that the plant was introduced with the culture, becoming naturalised and sub-spontaneous. Perhaps, the plant is found also in other localities in Romania, but not recorded. This is because it is confused with *Hesperis matronalis*, being that they resemble.

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REFERENCES


