

Youngia japonica (L.) DC. (Compositae), recently detected in Barcelona

S. PYKE

Jardí Botànic de Barcelona, Consorci de Museus de Ciències Naturals, c. Font i Quer, s/n, ES-08038 Barcelona, Spain

E-mail: spyke@bcn.cat

Editor: J. M. Montserrat

Received 17 July 2014; accepted 14 December 2014; published on line 09 January 2017

Abstract

YOUNGIA JAPONICA (L.) DC. (COMPOSITAE), RECENTLY DETECTED IN BARCELONA.— *Youngia japonica*, introduced accidentally in urban garden areas, is recorded for the first time from the Iberian Peninsula. It has maintained its presence in the place where it was first observed without expanding, and has reappeared over the following years. A possible means of introduction is along with *Zoysia*, species of grass used for forming lawns as an alternative to Bermuda grass.

Key words: *Crepis*; gardens; Iberian Peninsula; introduced species; *Youngia*.

Resumen

YOUNGIA JAPONICA (L.) DC. (COMPOSITAE) ESPECIE RECIÉN DETECTADA EN BARCELONA.— Se cita por vez primera en la península ibérica *Youngia japonica*, recientemente introducida en una zona ajardinada de Barcelona. Desde la primera observación la especie ha permanecido en el mismo lugar sin expandirse, pero reapareciendo los años posteriores. Se sugiere su posible introducción como contaminante de semillas o plantas de *Zoysia*, utilizada como alternativa de los céspedes de grama.

Palabras clave: *Crepis*; especies introducidas; jardines; península ibérica; *Youngia*.

Cómo citar este artículo / Citation

Pyke, S. 2016. *Youngia japonica* (L.) DC. (Compositae), recently detected in Barcelona. *Collectanea Botanica* 35: e005. doi: <http://dx.doi.org/10.3989/collectbot.2016.v35.005>

Copyright

© 2016 CSIC. This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY) Spain 3.0.

Youngia Cass. is a genus of Composite plants from warm temperate and tropical eastern Asia, closely related to *Crepis* L. and *Lapsana* L. It was included within *Crepis* from 1861 until 1937, *ut Crepis japonica* (L.) Benth., when Babcock and Stebbins demonstrated that plants now referred to as *Youngia* were worthy of being separated as a separate genus (Slanis & Perea, 2011).

Youngia japonica (L.) DC. originated in China and is also considered native to Korea and Japan, but today can be found as an introduction in many parts of the tropics, and also in subtropical and warm-temperate regions, for example northern Argentina, United States north to Pennsylvania and New York state, South Africa south to Natal or Australia south to New South Wales. It has also



Figure 1. *Youngia japonica* in its fruiting stage in 2014. BC herbarium material.

been detected in the Canary Isles (Siverio Núñez *et al.*, 2013) where it occurs as a garden weed in lawns and planted areas. To my knowledge, this dainty, unassuming pseudo-*Crepis* has not been detected in, or formally registered from, the Iberian Peninsula to date, and no herbarium specimens have come to light in BC or BCN.

The following record, therefore, constitutes the only one yet registered in this region. A colony of well over 100 individuals was spotted by the author of this article in a newly developed garden area in the spring of 2014. It reappeared in 2015 and 2016.

Spain, Barcelona: Prat Vermell, Can Tunis, UTM 31T DF2878, 0–10 m, zona ajardinada, 23.05.2014, S. Pyke 6939 (BC 940023; Fig. 1).

It is an annual species, sometimes biennial, and forms a basal rosette of more or less obovate, sometimes oblanceolate, lyrate leaves from whence arise slender, sparsely leafy scapes. The leaves and lower parts of the plant are variably pubescent, with weak, simple hairs dispersed over the surface. The stems branch above to form a panicle, or corymbiform cyme, with fine, capillaceous branches. They are usually leafless, at least above, in subsp. *japonica*. The capitula are small, similar to but smaller than those of *Crepis pulchra* L., with very short outer phyllaries. The florets and their ligules are yellow. The achenes are ribbed and fusiform with an attenuate apex and white pappus with a single whorl of barbed hairs. The ribs, two of which are more prominent, are finely spiculate or scabrid, this helping to effectively disperse the seed. *Youngia* differs from *Crepis* in its compressed, unequally-ribbed achenes. The presence of a pappus distinguishes it from *Lapsana*.

In the same locality where these plants were observed can be found other species which are frequently dispersed via standard nursery practices: *Epilobium obscurum* Schreb., *E. tetragonum* L., *Oenothera rosea* L'Hér. ex Ait., *Polypogon viridis* (Gouan) Breistr. and *Cardamine flexuosa* With. subsp. *debilis* O. E. Schulz, taxon present in the Peninsula and recently confirmed by F. Verloove (Verloove & Sánchez Gullón, 2012).

Another subspecies, *Y. japonica* subsp. *elstonii* (Hochr.) Bab. & Stebbins, or *Y. thunbergiana* DC., is also spreading outside its native area, and has been recorded from various countries, including eastern United States and Hawaii (Urbatsch *et al.*, 2013). The chief difference is in the presence of four to ten or more cauline leaves in this latter taxon.

The plant is certainly not naturalised yet, and has only appeared as a casual in planted areas of the port district of Barcelona, where it behaves as a rather discrete garden weed. The material collected is from Can Tunis, a part of the city now being redeveloped under the name Prat Vermell. The arrival of this plant in Barcelona could be attributed to its dissemination through horticultural practices, rather than a direct introduction from the port zone, which is the case of some other newcomers found in the area. The use of *Zoysia japonica* Steud., or its putative hybrid with *Z. matrella* (L.) Merr., to create urban lawns in the Greater Barcelona area, could constitute a possible means of introduction for this unassuming small plant which is of no ornamental value whatsoever. The seed might have arrived in the area along with the importation of living plant material (either seeds or developing plants, or perhaps in compost) either from East Asia or via another country where the species is now naturalised.

REFERENCES

- Siverio Núñez, A., Sobrino Vesperinas, E., Rodríguez de la Torre, H. A., Reyes-Betancort, J. A. & Santos Guerra, A. 2013. Nuevos xenófitos de elevada capacidad invasora para la flora canaria. In: Notas corológico-taxonómicas de la flora macaronésica (Nº 148-156). *Botánica Macaronésica* 28: 165–173.
- Slanis, A. C. & Perea, M. C. 2011. *Youngia japonica* (Asteraceae, Lactuceae), una novedad para la flora adventicia de Argentina. *Boletín de la Sociedad Argentina de Botánica* 46: 139–143.
- Urbatsch, L. E., Pruski, J. F. & Neubig K. M. 2013. *Youngia thunbergiana* (Crepidinae, Cichorieae, Asteraceae), a species overlooked in the North American Flora. *Castanea* 78: 330–337. <http://dx.doi.org/10.2179/13-018>
- Verloove, F. & Sanchez Gullón, E. 2012. New records of interesting vascular plants (mainly xerophytes) in the Iberian Peninsula. II. *Flora Mediterranea* 22: 5–24. <http://dx.doi.org/10.7320/FIMedit22.005>