



Lectotypification of Boissier's names *Centaurea hyalolepis* and *C. laxa* (Asteraceae, Cardueae)

Author: Negaresh, Kazem

Source: *Candollea*, 75(1) : 145-147

Published By: The Conservatory and Botanical Garden of the City of Geneva (CJBG)

URL: <https://doi.org/10.15553/c2020v751a13>

BioOne Complete (complete.BioOne.org) is a full-text database of 200 subscribed and open-access titles in the biological, ecological, and environmental sciences published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Complete website, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at www.bioone.org/terms-of-use.

Usage of BioOne Complete content is strictly limited to personal, educational, and non - commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

BioOne sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

Lectotypification of Boissier's names *Centaurea hyalolepis* and *C. laxa* (Asteraceae, Cardueae)

Kazem Negaresh

Abstract

NEGARESH, K. (2020). Lectotypification of Boissier's names *Centaurea hyalolepis* and *C. laxa* (Asteraceae, Cardueae). *Candollea* 75: 145–147. In English, English abstract. DOI: <http://dx.doi.org/10.15553/c2020v751a13>

Edmond Boissier (1810–1885) described several taxa in the genus *Centaurea* L. (Asteraceae), summarized in his *Flora orientalis* account. Lectotypes are designated here for the two names *Centaurea hyalolepis* Boiss. (sect. *Calcitrapa* DC.) and *Centaurea laxa* Boiss. & Hausskn. (sect. *Ammocyanus* Boiss.). Lectotypes are kept in the G-BOIS herbarium.

Keywords

ASTERACEAE – Cardueae – *Centaurea* – Typification

Address of the author:

Department of Horticulture, Faculty of Agriculture, Agricultural Sciences and Natural Resources
University of Khuzestan, Mollasani, Ahvaz, Iran. E-mail: negaresh@asnrkh.ac.ir

Submitted on February 27, 2020. Accepted on May 15, 2020.

First published online on June 17, 2020.

ISSN: 0373-2967 – Online ISSN: 2235-3658 – *Candollea* 75(1): 145–147 (2020)

© CONSERVATOIRE ET JARDIN BOTANIQUES DE GENÈVE 2020

Introduction

Centaurea L. s.l. with c. 600 species is among the largest genera in *Asteraceae* (HELLWIG, 2004). This genus of 40 sections occurs mainly in the Mediterranean and Irano-Turanian regions (LÓPEZ et al., 2011; NEGARESH & RAHIMINEJAD, 2014). Iraq is not rich in species of *Centaurea* if compared with the adjacent countries in the N and W Iran and Turkey. According to WAGENITZ (2019) the genus *Centaurea* consists of 44 species in 15 sections of which 6 species are endemic to Iraq.

For many years BOISSIER (1875)'s account on *Centaurea* and its close relatives in the *Flora orientalis* was one of the most complete monographs of this genus, including most of the species and proposing a subgeneric division. Many of the taxa listed were described by Boissier, some of them with other botanists. The Boissier's herbarium related to the *Flora orientalis* account is kept in Geneva as a separate historical herbarium with the acronym G-BOIS. Duplicates of Boissier's original material in Geneva can be found either in the Candolle herbarium (G-DC) or in the general collection (G) (see AL-SHEHBAZ & BARRIERA, 2019).

After BOISSIER (1875)'s *Flora Orientalis* and RECHINGER (1964)'s *Flora of Lowland Iraq*, the first comprehensive revision for Iraqi *Centaurea* was conducted by WAGENITZ (2006). He enumerated 40 species that are naturally found in this country. In his work many species were typified. However, neither *C. hyalolepis* Boiss. nor *C. laxa* Boiss. & Hausskn. were typified. In this brief article, we aim at designating lectotypes for both species on original material kept in G-BOIS. Scans of these lectotypes can be found in the CHG (2020) website.

Typification

Centaurea hyalolepis Boiss., Diagn. Pl. Orient. 6: 133. 1846.

- ≡ *Centaurea pallescens* var. *hyalolepis* (Boiss.) Boiss., Fl. Orient. 3: 691. 1875.
- ≡ *Centaurea pallescens* f. *hyalolepis* (Boiss.) Gugler in Ann. Hist.-Nat. Mus. Hung. 6: 209. 1908.
- ≡ *Calcitrapa hyalolepis* (Boiss.) Holub in Preslia 46: 227. 1974.

Type: “Hab. In Syria Aucher No. 3136, inter Bagdad et Alep Olivier, inter Alep et Mossoul Kotschy herb. Mus. Vindob.”

Lectotypus (designated here): **IRAQ**: “Inter Amaner et Tschalaga”, 1843, *Kotschy 360* (G-BOIS [G00758957] image seen; isolecto-: K [K000794203, K000794204] image seen). **Syntypi**: **IRAQ**: “de Bagdad à Alep”, s.d., *Olivier s.n.* (G-DC [G00472929] image seen, P [P00703822, P00703823, P00703824] image seen). **SYRIA**: *sine loco*, 1837, *Aucher-Eloy 3136* (G-DC [G00473282]!), K [K000794205] image seen, P [P00703825, P00703826] image seen).

Distribution. – *Centaurea hyalolepis* is widely distributed in Cyprus, Palestine, Jordan, Lebanon, S Iran, Iraq, W Syria and E Turkey (WAGENITZ, 2006). It is an Irano-Turanian element and grows in sandy clay plain, riverine thicket, waste, fallow and cultivated land, especially along irrigation channels, at elevations of 50–450 m.

Notes. – Three syntypes collections were cited by BOISSIER (1846) in the protologue: *Aucher-Eloy 3136*, *Kotschy 360*, and *Olivier s.n.* The specimen *Kotschy 360* deposited in G-BOIS is designated here as the lectotype because it is the only original material in G-BOIS and the specimen shows all the relevant characters in regard to the protologue.

On the label of the lectotype is printed: “HRB. MUSEI PALAT. VINDOB.” and handwritten the locality as above. Another label has handwritten: “*Centaurea pallescens* v. *hyalolepis* / *Centaurea hyalolepis* ! Boiss.”. On the label of the isolectotype K000794203 is printed: “Pl. Mesopot., Kurdistan. & Mossul. Kotschy. 1841.” and handwritten: “360 *Centaurea hyalolepis* Boiss.”, but the specimen K000794204 has only a printed label with: “Pl. Mesopot., Kurdistan. & Mossul. Kotschy. 1841” indicated.

Centaurea laxa Boiss. & Hausskn. in Boiss., Fl. Orient. 3: 640. 1875.

Type: “Hab. in agris et desertis Mesopotamiae inter Orfa et Kharran et ad fluv. Chabur (Haussk!), in monte Gebel Belas deserti ad Palmyram (Bl!)”.

Lectotypus (designated here): **TURKEY**: “in agris inter Orfa & Hkarran”, 10.V.1865, *Haussknecht s.n.* (G-BOIS [G00334039]!; isolecto-: E [E00383946]!, JE [JE00015651, JE00015652]!, W [W0044960]!). **Syntypi**: **IRAQ**: “In deserto fl. Chabur”, V.1867, *Haussknecht 589* (BM [BM000906196]!, G-BOIS [G00759563]!, JE [JE00015649]!, K [K000794083]!, P [P00646492, P04092726]!). **SYRIA**: “De Hama à Palmyre. Dauch Djebel Belas”, 19.V.1857, *Blanche 3409* (G-BOIS [G00759565]!, JE [JE00015650]!, P [P00646493]!).

Distribution. – *Centaurea laxa* has a restricted distribution in SE Turkey, N Syria and as occasional in the western lower steppe region of Iraq (WAGENITZ, 1975, 2006). It is an Irano-Turanian element and grows on calcareous-gypsiferous soil, at elevations of 200–700 m.

Notes. – BOISSIER (1875) mentioned three syntypes in the protologue: *Haussknecht s.n.*, *Haussknecht 589* and *Blanche 3409*. Original material of all three syntype have been located in G-BOIS. *Haussknecht s.n.* is designated here as the lectotype because it is the best preserved collection.

The labels on the isolectotypes collections in E, JE, and W slightly differ from the lectotype, with the JE sheets noting “n° 458”; the E and W sheets stating “alt. 1000 ped.”.

The four duplicates of the syntypus *Hausknecht 589* deposited in BM, K and P have similar label as the G-BOIS collection, but lacking collection number.

Acknowledgements

I am indebted to the personnel of the following herbaria: BM, E, G, JE, K, P, and W, for their contribution during the revision of material and for providing the images of types. I would also like to thank the Agricultural Sciences and Natural Resources University of Khuzestan for financial support. I am finally grateful to Gabrielle Barriera for her help in improving an earlier version of this manuscript.

References

- AL-SHEHBAZ, I.A. & G. BARRIERA (2019). Typification of Edmond Boissier's Cruciferae (Brassicaceae) names enumerated in *Flora Orientalis*. *Boissiera* 72.
- BOISSIER, E. (1846). *Diagnoses plantarum orientalium novarum* 6. Leipzig.
- BOISSIER, E. (1875). *Centaurea*. *Fl. Orient.* 3: 614–695.
- CHG [CATALOGUE DES HERBIERS DE GENÈVE] (2020). *Base de données des herbiers en ligne du Conservatoire et Jardin botaniques de la Ville de Genève* [<http://www.ville-ge.ch/musinfo/bd/cjb/chg/index.php?lang=en>].
- HELLWIG, H. (2004). Centaureinae (Asteraceae) in the Mediterranean—history of ecogeographical radiation. *Pl. Syst. Evol.* 246: 137–162.
- LÓPEZ, E., J.A. DEVESA & I. ARNELAS (2011). Taxonomic study in the *Centaurea longei* complex (Asteraceae). *Ann. Bot. Fennici* 48: 1–12.
- NEGARESH, K. & M.R. RAHIMINEJAD (2014). A contribution to the taxonomy of *Centaurea* sect. *Cynaroides* (Asteraceae, Cardueae-Centaureinae) in Iran. *Phytotaxa* 158: 229–244.
- RECHINGER, K.H. (1964). *Flora of Lowland Iraq*. Weinheim.
- WAGENITZ, G. (1975). *Centaurea* L. In: DAVIS, P.H. (ed.), *Fl. Turkey* 5: 465–585.
- WAGENITZ, G. (2006). A revision of *Centaurea* (Compositae-Cardueae) in the flora of Iraq. *Rostaniha* 7, suppl. 2: 343–394.
- WAGENITZ, G. (2019). *Centaurea* L. In: GHAZANFAR et al. (ed.), *Fl. Iraq* 6: 111–144.