

LACTUCA ADENOPHORA, A NEW RECORD FOR THE FLORA OF IRAN

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Received 2022. 02. 07; accepted for publication 2022. 05. 11

Maroofi, H. & Rastegar, A. 2022. 06. 30: *Lactuca adenophora*, a new record for the flora of Iran. *Iran. J. Bot.* 28 (1): 41-44. Tehran.

Lactuca adenophora Boiss. & Kotschy (Asteraceae), is reported here as a new record from Nacarouz and Dalanpar Mountains for the flora of Iran. The geographical distribution of the new record and its distinguishing characters plus its detailed photos are presented.

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Keywords: New report; Iran; Nakarouz Mountain; Dalanpar Mountain; Cichorieae

Lactuca adenophora گزارشی نو برای فلور ایران

حسین معروفی: مربی پژوهش، بخش تحقیقات جنگلها و مراتع، مرکز تحقیقات و آموزش کشاورزی و منابع طبیعی استان کردستان، سنندج، سازمان تحقیقات آموزش و ترویج کشاورزی، ایران

آزاد رستگار: استادیار پژوهش، بخش تحقیقات جنگلها و مراتع، مرکز تحقیقات و آموزش کشاورزی و منابع طبیعی استان کردستان، سنندج، سازمان تحقیقات آموزش و ترویج کشاورزی، ایران

Lactuca adenophora به عنوان گزارشی نو برای فلور ایران از کوههای نکرز و دالانپر معرفی می شود. پراکنش جغرافیایی و صفات مورفولوژیکی این گونه و همچنین تصاویر مربوط به آن ارائه می گردد.

INTRODUCTION

Lactuca L. with about 200 accepted species names is distributed in Europe, Africa, Asia, and North America (Kilian & al. 2009a, 2017; Wang & al. 2013; Guzel & al. 2018). According to Flora Iranica 12 species of *Lactuca* are growing in the Flora Iranica area of which 9 species grow in Iran. Kilian, N. & al. (2012) introduced two new mountainous species of *Lactuca* (Cichorieae, Asteraceae) from Iran. By introducing two new and record species the number of *Lactuca* species in Iran increases to 12, two of which are annual and the others are perennial (Mozaffarian 2015). As of the latest, there are reported 11 species of *Lactuca* in Flora of Iran (Naseh 2013).

During the identification of collected specimens from west of Iran in the HKS herbarium, an unknown species was noticed, and more detailed taxonomic treatments and cross-checking. We could not identify it

using Flora Iranica (Rechinger 1977) and Flora of Iran (Naseh & al. 2013). Finally, it was determined as *Lactuca adenophora*, an endemic taxon for the flora of Turkey, but published there as *Cicerbita adenophora* (Jeffrey 1975). *Lactuca adenophora* (*Cicerbita adenophora*) was reported previously from Turkey and north of Iraq, and now it records for the first time in northwest Iran. Geographical distribution, morphological characters, and photos are given here.

MATERIALS AND METHODS

Herbarium specimens of the genus *Lactuca* collected from Kurdistan and West Azerbaijan Provinces, deposited in the Herbarium of Kurdistan Agricultural and Natural Resources Research and Education Center (HKS: acronym according to Thiers 2021) were examined and identified, using relevant literature (Rechinger 1977; Jeffrey 1975; Naseh & al.

2013). Morphological characters of the new species and its closest relatives were examined using a ZEISS stereo-binocular microscope. Adobe Photoshop CS6, ver. 13.0 was used to improve the resolution and quality of the photographs. A distribution map of the studied taxa was created using ArcMap 10.6.1.

RESULTS AND DISCUSSIONS

Lactuca adenophora Boiss. & Kotschy, (Fig. 1).

Syn: *Cicerbita adenophora* (Boiss. & Kotschy) Beauverd in Bull. Soc. Bot. ser, 2, 2: 125 (1910).

Perennial taprooted herb. Stem erect 42-100 cm high, unbranched, glandular, or hispid in upper parts. Leaves alternate, mostly basal, basal, and lower cauline leaves obovate, 21-33 x 6-8 cm long, \pm runcinate, rarely glabrous or glandular, and scabrid or hispid. Cauline leaves decrease rapidly in size towards the end of the stem, ovate to obovate, runcinate, sinuate-dentate or denticulate, acuminate, auriculate, or petiole-like, attenuate with a wing petiole, rarely glabrous, glandular or scabrid and hispid. Synflorescence corymbiform, 15-38-capitulate. Peduncle glandular and hispid covered with bracts. Involucre 13–15 mm long; phyllaries 15-18, 3-4 seriate, glandular and hispid or rarely glabrous, green. Corolla ligulate, 20–21 mm long, pale blue; tube pilose at the apex. Achenes 5-6 mm, light brown, with 8 ribs, with a filiform beak; beak c. 0.5 mm long; Pappus white; inner 7.5 mm, the outer c. 0.3 mm.

Specimens examined: Iran, Kurdistan Province, c. 30 km from Saqqez to Baneh, Piromaran village,

Nacarouz mountain, 2500 m, 21.05.2005, Maroofi & Moradi, 7244; same place, 12.06.2001, Maroofi & Yosefi, 1216.

Iran, West Azerbaijan, Southwest of Urmia, Dalanpar Mountain, 2700-3000 m, 11.07.2019, Aref Tabad, 14351 (Map. 1).

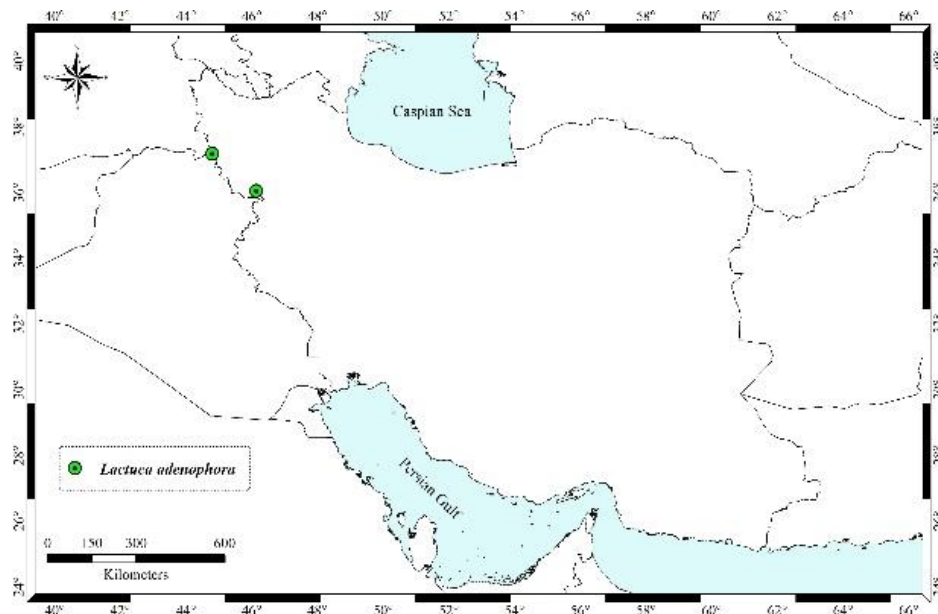
Distribution: Turkey, northern Iraq, Iran.

Habitat: meadows and mountain slopes above 2500 m.

Taxonomic Note

Three genera including *Scariola*, *Cicerbita*, and *Mulgedium* are treated as distinct genera in Flora of Turkey (Jeffrey 1975), but more recently *Scariola* and *Mulgedium* were considered as congeners of *Lactuca* by Koopman & al. (1998), Sell and Murrell (2006), Lack (2007), Kilian & al. (2009a), and Wang & al. (2013). *Cicerbita* and many of its current members were treated as species of *Lactuca* (Kilian & al., 2017). In accordance with these results, all taxa, including doubtful records listed under *Cicerbita*, in Flora of Turkey (Jeffrey 1975) were transferred to *Lactuca* by Kilian & al. (2009b) and Ekim (2012). Therefore, in this paper, *Cicerbita adenophora* is recognized as a synonym of *Lactuca adenophora*.

The closest relative of *Lactuca adenophora* is *L. racemosa* Willd., an endemic to S Caucasus and Turkey. These two taxa are easily distinguished from each other by differences in their habit, achene size, beak length, indumentum of bracts, and pedicels (Jeffrey, 1975).



Map 1. Distribution map of *L. adenophora* in Iran.



Fig. 1. Herbarium specimen of *L. adenophora* Boiss. & Kotschy.

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