TRIFOLIUM INCARNATUM L. (PAPILIONACEAE), A NEW RECORD FOR THE FLORA OF IRAN

M. A. Tabad, M. Nemati, & N. Jalilian

Received 2015.07.27; accepted for publication 2015.12.15


Trifolium incarnatum L. is reported for the first time for the flora of Iran. It has been collected from Marivan area in Kurdistan province. This species belongs to the section Trifoilium and distinguished from T. sylvaticum Gerard ex Loisel by the following characters: Dense, large head (about twice as much as the later one) and red flowers. Also it differs from T. stellatum L. by possessing larger leaflets, oblong heads (about two times longer than the later) and red flowers.

Mohammad Aref Tabad, Department of Medicinal Plants, ACECR, Kermanshah, Iran.- Mostafa Nemati (correspondence <paykanim@gmail.com>) & Nastaran Jalilian, Kermanshah Agricultural and Natural Resources Research and Training Center, P.O. Box. 67145-1661, AREO, Kermanshah-Iran.

Key words: Trifolium incarnatum; crimson clover; new report; Kurdistan, Iran

INTRODUCTION

The genus Trifolium L. comprises about 237 species mostly growing in the temperate northern hemisphere but many of them occur at high elevation in mountainous regions in the South America and Africa as well. Trifolium incarnatum L. (crimson clover, scarlet clover, Italian clover or carnation clover) is widely cultivated and more or less naturalized in some areas. During the study of herbarium specimens of Kermanshah (RANK), a specimen was determined as Trifolium incarnatum L. which had not been reported from Iran before and is a new record for the flora of Iran.

New record

Trifolium incarnatum L.

Kurdistan: Marivan, Miraji Mountain, above Zarivar Lake, 1522m, Tabad 7992, RANK.

Annual, appressed to patulous-villous, 20-35 cm. Stems erect or ascending. Stipules membranous, the lower part sheathing below, connate and adnate to petioles for three-fifths of their length, free portion green or purplish, ovate-dentate, hairy. Leaflets 7-20 × 10-22 mm, obovate, retuse, dentate. Heads 15-20 × 25-45 mm, oblong; peduncle thick. Flowers 10-12 mm. Calyx tube cylindrical with 10 prominent nerves; teeth linear to subulate, acute, almost equal. Corolla deep red, longer than calyx. Pod ovoid, membranous. Seed
Flowering period is from early April to June.

*Trifolium incarnatum* is related to *T. sylvaticum* Gerard ex Loisel and *T. stellatum* L. but it is distinguished from *T. sylvaticum* Gerard ex Loisel by the following characters: Dense, large head (about twice as much as the later one) and red flowers. Also it differs from *T. stellatum* by possessing larger leaflets, oblong heads (about two time longer than the later) and red flowers.

**Distribution and habitat:** General distribution of the species is Europe (British Isles, Portugal, Spain, France, Italy and islands, Balkan & Peninsula) and Turkey. It is cultivated through Europe and also in Turkey. This species was observed as a naturalized or wild species in its mentioned habitat in Marivan in the west of Iran (map 1 and fig. 1). It is located above Zarivar Lake. The habitat is a mountainous forest dominated by oak trees. The altitude range of the habitat is between 1500 and 1750m above sea level. The soil texture is clay to clay-loam. This species grows on the south slope.

Map 1. Distribution map of *Trifolium incarnatum* in Iran.

**ACKNOWLEDGEMENT**

The authors would like to thank Mr. Rahimi from Kermanshah Natural Resources Research and Training Center who provided the distribution map.

**REFERENCES**


Fig. 1. *Trifolium incarnatum* in its habitat (photo by M. A. Tabad, 22 April 2015).