

## PHYSALIS ANGULATA L., AS A NEW RECORD FOR THE FLORA OF IRAN

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*Physalis angulata* L. is reported as a new record for the flora of Iran. A taxonomic description along with the illustrations of the species are prepared on the basis of some collections from Fars province, Iran.

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**Key words:** new record; weed; exotic; Solanaceae; *Physalis*; Iran

***Physalis angulata* L.** گزارشی جدید برای فلور ایران

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گونه *Physalis angulata* L. برای نخستین بار از فلور ایران گزارش می‌شود. یک شرح تاکسونومیک به همراه تصاویری از این گیاه بر اساس چند جمع‌آوری از استان فارس در اینجا ارائه می‌شود.

### INTRODUCTION

The genus *Physalis* L. consists ca. 100 species and mainly is native to tropical and temperate America, but some of the species have a world-wide distribution (Sultana & al. 2008). Following floristic studies in many parts of Fars province by the first author, some unknown *Physalis* specimens were collected. After examination and consultation with the related literature sources (Waterfall 1967; Schonbeck-Temesy 1972; Pojarkova 1997; Khatamsaz 1998; Gönen & al. 2000; Sultana & al. 2008), it was clear that the specimens were *P. angulata* L., which is a new record for Iranian flora.

### RESULT AND DISCUSSION

*Physalis angulata* L., Sp. Pl.: 183. 1753. (fig. 1).  
*Examined specimens.* Fars province: Marvdasht, Dorudzan area, near Jeshnian, near Zaneh Mt., 30°8'2.31"N, 52°32'3.06"E., 1629 m, 23.08.2012, Zeraatkar 12838 (T, HSU). Near Hesamabad, near Setakhr-e Gozin Mt., 30°9'43.11"N, 52°31'42.37"E,

1627 m, 10.07.2016, Zeraatkar s.n. (HSU). Beyza, Banesh, 30°5'40.92"N, 52°26'6.65"E, 1617 m, 2.07.2018, Zeraatkar s.n. (HSU).

Annual herb, up to 50 cm tall, erect. Stems branched, hollow, glabrous or with a few short antrorsely appressed hairs especially on flowering calyx. Leaves simple, ovate to ovate-lanceolate, elliptic or lanceolate, blade 1.5-7.5 × 0.5-2.7 cm, apex acute, margin irregularly toothed, rarely repand or subentire in lower part of stem, glabrous or rarely with sparsely adpressed hairs, base attenuate; petioles 0.5-4.5 cm long. Inflorescence solitary, axillary. Pedicel 2.2-4 cm long, elongated in fruit up to 4.5 cm. Flowering calyx campanulate, 5-lobed, 3-5 mm long, angled or ribbed, in fruit 2-2.3 cm long. Corolla campanulate, pale yellow to whitish, spotted in throat, 4-7 × 3-5 mm. Anthers bluish, (0.8) 2-2.2 mm; filaments ca. 4 mm long. Seeds brown-yellowish, kidney-shaped, 1.5-2 × 1-1.5 mm.

*P. angulata* easily differs from another weed species of the genus in Iran, i.e., *P. divaricata* D. Don,

by having pale yellow to whitish corolla (vs. yellow) and longer pedicel (2.2-4 cm vs. 3-8 mm). During a long study in flora of Dorudzan area in north Fars province from 2011, the numerous specimens of this species were observed and it seemed that the plant is naturalized in the area. It grows in summer crop fields such as tomato, pepper and beans.

The species native range is tropical and subtropical America (POWO 2020). It is widely spread as a weed

in most countries of tropical Africa and Asia (Baytop 1978; Zhi-Yun & al. 1994; Sultana & al. 2008). This is the first report of its presence in the flora of Iran.

This species is recorded already in several territories around of Iran, i.e. Afghanistan, Pakistan, Turkey, Iraq, Syria, Saudi Arabia, Kuwait, Oman and Yeman (Özhatay & Kültür 2006; Mahklouf, 2016; Ullah Khan & al. 2013; Mathew & al. 2012; POWO 2020).

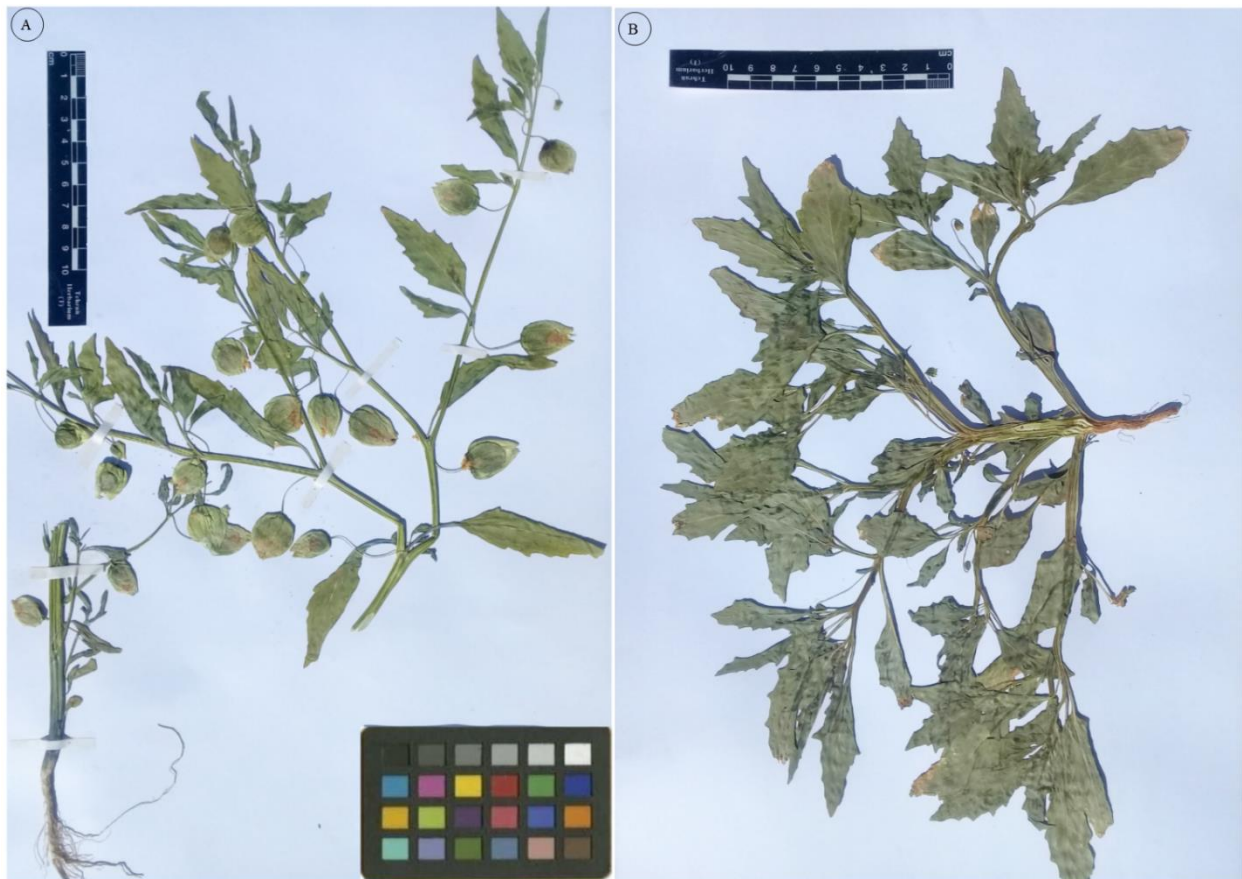


Fig. 1. *Physalis angulata*. A, in fruit (Zeraatkar s.n. -HSU); B, in flower (Zeraatkar 12838-T).

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