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Physalis pruinosa L (Solanaceae): A new distributional record to Adilabad District of Telangana state, India

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ABSTRACT

The present paper deals with an addition of new taxa of flowering plant to the Adilabad District of Telangana State. Updated information on nomenclature, correct description and locality is provided. This is a new distributional record for this area.

KEY WORDS: *Physalis pruinosa* L., Solanaceae, new distributional record, Adilabad District, Telangana.

INTRODUCTION:

Physalis is an main genus of the Solanaceae family. Most of the species are herbaceous annuals or perennials, inhabitant to tropical North and South America. The genus *Physalis* L. (Solanaceae) originates from the Andes, with tropical multinational distribution, occurring from Southern -North America to South America, with centers of diversity in Mexico, United States and Central America (**Fischer & Martinez 1999, Silva & Agra 2005**).

In India, . (**Deb 1979**), have been reported total six species of *Physalis i.e. P. alkekengi* L., *P. angulata* L., *P. ixocarpa* Brot. Ex. DC., *P. longifolia* Nutt., *P. peruviana* L. and *P. minima* Lwhile in Maharashtra the genus is represented by 4 species, *P. angulata* L., *P. longifolia* Nutt. *P. peruviana* L. and *P. minima* L. and *P. minima* L. **Singh and Pandey** (2002) reported a new record from Jodhpur (Rajasthan) in Northern India as *P. maxima* Mill. However, *P. maxima* is conspecific with the *P. pruinosa* L. **Raju** *et. al.*, (2007) have also collected *Physalis pruinosa* in Chowtuppal and Bhongiri, Nalgonda district of Andhra Pradesh, Peninsular India. **Subash** *et. al.*, (2014) collected *P. maxima* Mill. as *P. pruinosa* L., from Deekshabhoomi Premises, Nagpur district recorded to the Flora of Maharashtra State.

MATERIALS AND METHODS:

During the floristic survey of Adilabad district, collection of an interesting specimen belonging to the family Solanaceae. While going through the cross examination with the other species of *Physalis*, the specimen was found associated to *P. lagascae* and *P. pubescens* but differed in certain floral and morphological characters. Critical revise of this specimen and pertinent literatures (**Santapau, 1948**, **Pullaiah** *et. al.*, **1992**; Martínez's, **1993**; **Pullaiah** *and* **Chennaiah**, **1997**; **Almeida**, **1998**; **Reddy** *et. al.*, **2001**, **Singh & Karthikeyan**, **2001**, **Singh** *et. al.*, **2001**; **Raju** *et. al.*, **2007**,) exposed that the identity of the specimen as *P. pruinosa* L. The authors concluded it as *Physalis pruinosa* L. which has reports new distributional record for the Adilabad district of Telangana State.

A concise taxonomical description along with phenology, distribution, nomenclature and photographs are provided here. The processed specimens (Voucher No. 288) of the plant is deposited in the Department of Botany, Baliram Patil College, Kinwat, Nanded District, and Maharashtra, India.

RESULT AND DISCUSSION:

Taxonomic Description:

Physalis pruinosa L., Sp. Pl.: 184. 1753; Martínez in Taxon 42: 104. 1993. Type: Mexico:Herb. Linn. no. 247.13 (HT: LINN). (Figure-1).

Erect, stout annual herbs, viscid pubescent all over. Stems (young) and major veins of leaves covered with villous pubescence intermixed with short stalked glands; stems up to 1 m high, angularribbed, fistular. Leaves simple, spirally arranged, single at each node, 5-12×4-8 cm, ovate, base oblique, rounded, margin sinuate-dentate above middle, acuminate, light green. Petioles 5-10 cm. Flowers solitary, axillary, small, 1.5- 2 cm across, pedicels erect, 2-5 cm. Calyx apex up to 0.8 cm, subulate. Corolla campanulate, pale yellow, 1.5-2 cm across, throat with 5, inconspicuous, dark green blotches. Stamens 5, filaments 0.2-0.4 cm long, exerted, glabrous, epipetalous; anthers up to 0.4-0.6 cm long, yellow. Carpel 0.3-0.4 cm, Ovary globose; style terminal, stigma green. Fruiting pedicels drooping, extending up to 6 cm. Fruiting calyx longer than broad and gradually acuminate at apex, fruiting calyx apex 1-2.5 cm long, downy, inflated, deeply sunken at base, 5-angled, reticulately veined, glabrescent, acuminate. Fruits persistent, not falling; alternately borne from the first dichotomy. Berries gray-green, 1-2 cm across. Seeds many, 0.3-0.4 cm, ovoid, reniform, brownish and pitted.



Figure. No. 1- Habit, flower, fruit and berry of *Physalis pruinosa* L.

Flowering & Fruiting: December – April.

Distribution: Mexico and Central America; introduced into tropical Asia (India: Andhra Pradesh, Rajasthan, Tamil Nadu, Maharashtra etc.).

Specimens Examined: Old housing board colony, Adilabad District, Telangana State, India. **G. P. S. Location:** N "19⁰39'54.91836", E 78⁰31'54.45948"

Collected by: Eanguwar Srinivas Reddy on dated 15 and April 2020. (Voucher No. 288).

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