

## *Sicyos angulatus* L. (Cucurbitaceae): a new adventive species for the flora of India

During the course of field work in 2013–2015, specimens of a cucurbit were collected from the forest area of Shimla (Himachal Pradesh). On the basis of study of these specimens and consultation of taxonomic literature<sup>1,2</sup> and online herbaria, it was identified as *Sicyos angulatus*, a native of eastern North America. Literature survey<sup>3–5</sup>, searches in e-Flora of India (Botanical Survey of India, BSI) and Herbarium of BSI, Northern Regional Centre, Dehradun revealed that this species is new and adventive in India. A detailed description along with photographs is provided to facilitate its identification.

*Sicyos angulatus* L., Sp. Pl. 2: 1013., 1753.

Common names: Bur-cucumber, one-seeded bur-cucumber, star-cucumber (English).

Annual vine, reaching 4–8 m in length (Figure 1 a). Stem herbaceous, angular, pubescent. Leaves simple, alternate, shallowly 5-lobed, 5–15 × 7–15 cm, pubescent, palmately veined, lobes acute or

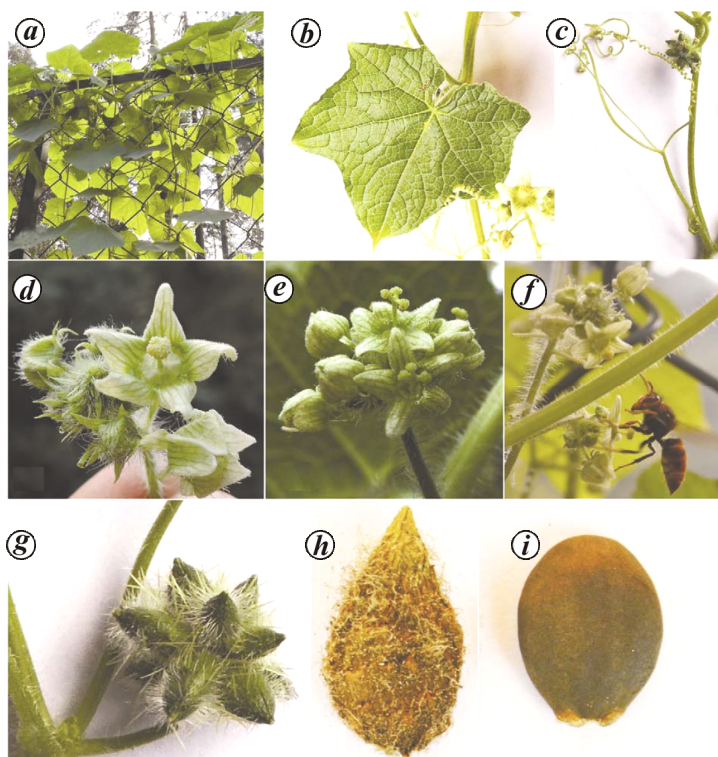
acuminate with denticulate margin (Figure 1 b). Tendrils axillary, 3 or rarely 4 branched (Figure 1 c). Flowers unisexual, born on pubescent peduncles, both types occurring on the same plant (monoecious). Staminate flowers 10–12 mm in dia., in 3–10 flowered racemes, peduncles longer than the pedicels (Figure 1 d). Pistillate flowers 3–5 mm across, smaller than staminate flowers, bell-shaped, 3–10 in compact globose cymes, peduncles and pedicels equal in length (Figure 1 e). Calyx green, 5-toothed, pubescent. Corolla white with green striations, petals 5, connate at base, broadly campanulate. Stamens united to form a central column in staminate flowers (Figure 1 d). Ovary in pistillate flower unilocular, style slender, stigmas 3 (Figure 1 e). Fruits produced in star-shaped clusters, 1.5–3 cm in diameter, radiating from a central point (Figure 1 g). Each fruit ovoid, 1-seeded berry, 10–15 mm, armed with slender spines, initially green, turning brown, indehiscent (Figure 1 h). Seeds 8–10 × 6–8 mm, dark brown, flat, tapered

at one end, indehiscent (Figure 1 i). Pollinated by wasps and bees (Figure 1 f).

Flowering and Fruiting: September to November.

Distribution: India: Himachal Pradesh (Shimla), earlier reported from<sup>6</sup> Austria, Bulgaria, Canada, China, Croatia, Czech Republic, France, Germany, Greece, Italy, Japan, Korea Republic, Mexico, Poland, Romania, Russia, Spain, Turkey, Ukraine, United Kingdom and United States of America.

Herbarium specimen: Plant specimens (AT-1) were collected near Khalini, Shimla (31°5'18.58"N, 77°10'24.89"E, altitude 1998 m) Himachal Pradesh on 20 September 2015 and submitted in BSD (Acc. No. 116042).



**Figure 1.** *Sicyos angulatus*; a, Habit; b, Leaf; c, Tendrils; d, Male flowers; e, Female flowers; f, Pollination; g, Fruit cluster; h, Fruit; i, Seed.

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ANIL KUMAR THAKUR

Department of Botany,  
Centre of Excellence,  
Government College, Sanjauli,  
Shimla 171 006, India  
e-mail: anilthakur2001@gmail.com