

# INVESTIGATING THE DISTRIBUTION, ABUNDANCE, HABITATS AND CONTROL OF BUR CUCUMBER *SICYOS ANGULATUS* (CUCURBITACEAE), AN INVASIVE ALIEN PLANT SPECIES IN TURKEY

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Bur cucumber (*Sicyos angulatus* L.) is a significant invasive alien plant species in the Black Sea region, increasingly threatening agricultural fields and crops as well as unmanaged areas. This study investigates the distribution and community status of bur cucumber within the regional flora. A comprehensive field survey was conducted, encompassing 313 sample plots through field observations and direct engagement with local communities. A spatial database was established to document data from each plot, including coordinates, elevation, date, local area, plant abundance, ground cover-abundance ratio, species phenology, and the presence of climbing plants. Results revealed that bur cucumber coexists with 411 vascular plant species across 13 EUNIS habitat types, including several endemic and rare species such as *Dianthus carmeltarum* Reut. ex Boiss. and *Heracleum platytaenium* Boiss. An action plan employing a combination of mechanical and chemical methods to ensure effective control was developed to guide stakeholders in mitigating the ongoing invasion of bur cucumber, particularly impacting economically important crops like tea, hazelnut, and kiwi. The proposed strategies provide a practical framework for controlling and preventing further proliferation of this invasive species. Collaborative efforts among relevant institutions are essential for managing invaded habitats, especially in dumping sites and abandoned areas.

**Keywords:** action plan, Black Sea region, Geographic Information System, invasive species, management, *Sicyos angulatus*

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