

First Record of *Ophiopogon japonicus* in India

Prelims: Current events of national and international importance | Environment

Why in News?

Botanists from the Wildlife Institute of India (WII), Dehradun, and the Uluberia Botanical Institute Herbarium documented the plant species *Ophiopogon japonicus* in the wild in India for the first time.

- The species was recorded at an elevation of 2,185 meters in a moist, temperate broadleaf forest floor in the **West Kameng district of Arunachal Pradesh (Eastern Himalayas)**.
- **Common Names** - Dwarf Lilyturf, Mondo Grass, or Fountain Plant.
- **Taxonomic Classification**
 - **Family**- Asparagaceae (subfamily Nolinoideae; historically placed under Liliaceae).
 - **Genus** -The genus *Ophiopogon* comprises roughly 85 species worldwide; with this discovery, the number of species formally documented from India increases from **7 to 8**.
- **Morphological Features**
 - An evergreen, clumping perennial herb with narrow, arching, grass-like leaves (15–30 cm long) featuring backwardly serrated (*retro-serrulate*) margins.
 - Produces short racemes of small white-to-pale-purple flowers that mature into metallic, bright cobalt-blue berry-like fleshy seeds.
 - Spreads via subterranean stolons and slender rhizomes with swollen, water-storing tuberous roots.
- **Geographic Distribution** -Native across East Asia (China, Japan, Korea, and Nepal), thriving across a wide altitudinal range of 200–2,800 meters.

Medicinal Value

- **Traditional East Asian Medicine** - The dried tuberous roots are known as ***Ophiopogonis Radix*** or ***Maidong*** in Traditional Chinese Medicine (TCM).
- **Bioactive Properties**- Rich in bioactive polysaccharides, saponins, and flavonoids.
- **Therapeutic Applications**- Exhibited anti-inflammatory, antioxidant, immunomodulatory, and cardioprotective properties; clinically used to treat chronic dry coughs, protect mucosal barriers, and support cardiovascular health.

Conservation Significance

- **Soil Conservation**- Its fibrous, stoloniferous root matrix effectively binds loose topsoil on steep Himalayan slopes, mitigating soil erosion and landslides from heavy monsoon runoff.
- **Biodiversity Benchmark**- Extends the known geographic distribution of East Asian flora into the Eastern Himalayas, highlighting the region as a critical, under-explored botanical hotspot.
- **Local Vulnerability**- The newly recorded population faces localized anthropogenic threats due to its proximity to roadside habitats vulnerable to highway construction, slope

degradation, and habitat fragmentation.



Reference

[Times of India | Ophiopogon japonicus](#)

