

Black Goji Berry of Ladakh



Scientific Name

Lycium ruthenicum Murray

Family

Solanaceae

Common Names

Black Goji Berry, Russian Thorn

Local / Sowa-Rigpa Name

De-tser / Khe-tser

Plant Description

Lycium ruthenicum is a thorny, highly branched perennial shrub adapted to the dry and cold environments of the Himalayan region, including Ladakh. The plant has numerous slender, greyish-green branches, with short spines occurring along the branches. The leaves are small, narrow and fleshy, usually arranged singly or in small clusters on the young branches. The plant has a compact, spreading growth habit and is well adapted to arid conditions.

Flowers

The flowers are relatively small and typically arise from the leaf axils. They are generally funnel- to bell-shaped, with pale violet to purple coloration.

Fruit

The characteristic fruit is a small, fleshy berry, developing a dark purple to almost black colour when mature. These dark berries are the most distinctive and economically important part of the plant.

Important Phytochemicals

- Anthocyanins
- Polysaccharides
- Flavonoids
- Phenolic compounds
- Carotenoids
- Organic acids

Anthocyanins are largely responsible for the intense dark colour of the ripe berries.

Traditional & Potential Uses

In traditional Himalayan and Sowa-Rigpa practices, different parts of the plant, particularly the berries, have been used in traditional preparations. The berries are also valued as a source of natural pigments and antioxidant compounds.

Ecological Importance

The species is well suited to cold, dry and saline environments and can contribute to vegetation cover in arid landscapes. Its adaptation to harsh conditions makes it a potentially useful species for dryland biodiversity and sustainable plant-resource conservation.

Conservation

Wild populations should be conserved through responsible harvesting, propagation and cultivation. Collection of berries and plant material should avoid damaging the whole shrub or its natural regeneration.