GYMNEMA

Gymnema sylvestre is a perennial woody vine native to Asia (including the Arabian Peninsula), Africa and Australia. It has been used in Ayurvedic medicine. Common names include gymnema, Australian cowplant, and Periploca of the woods, and the Hindi term *gurmar*, which means "sugar destroyer".

Chemical constituents

The leaves and extracts contain gymnemic acid, the major bioactive constituents that interact with taste receptors on the tongue to temporarily suppress the taste of sweetness.

Uses

- 1. Reduction of sugar intake: *G. sylvestre* extracts taken in the form of lozenges, mouthwash, or tea diminishes the consumption of sweet foods and overall caloric intake. Extracts (formulated as a mint lozenge) reduced the desire for high-sugar foods and the pleasant taste of candy. Research also suggests that *Gymnema sylvestre* extracts reduce cravings for sugar. In a double-blind study, participants who received a gymnemic acid lozenge declined candy (before tasting it) more often than the placebo group.
- 2. Diabetes: Early research suggests when a specific gymnema extract (GS4) is taken orally along with insulin or diabetes medications, blood sugar reduction in people with type 1 or type 2 diabetes is enhanced.
- 3. Weight loss: In Japan, 50 tons of *G. sylvestre* leaves are consumed annually for the purpose of weight loss. Early research suggests that taking a specific combination of *Gymnema sylvestre* extract, hydroxycitric acid, and niacin-bound chromium by mouth for 8 weeks might reduce body weight in people who are overweight or obese.
- 4. Traditional uses: In Eastern and Ayurvedic medicine, *G. sylvestre* leaves and extracts have been used to treat eye diseases, allergies, constipation, cough, dental caries, obesity, stomach ailments, and viral infections. *G. sylvestre* has also been used as an antioxidant, antimicrobial, and aphrodisiac

GOKHRU

Synonym

Caltrops fruit.

Biological Source: In Ayurveda two types of Gokhru are used, that is, Bada and Chota Gokhru. The smaller or Chhota Gokhru is the dried ripe seeds of *Tribulus terrestris* Linn., belonging to family Zygophyllaceae.

Chemical Constituents

The dried fruits of T. terstris consist of steroidal saponins as the major constituents. It includes terestrosins A, B, C, D and E, desgalactotigonin, F-gitonin, desglucolanatigonin and gitonin. The hydrolysed extract consists of sapogenins such as diosgenin, chlorogenin, hecogenin and neotigogenin. Certain other steroidal such as terestroside F, tribulosin, trillin, gracillin, dioscin have also been isolated from the aerial parts of the herb. The flavonoid derivatives reported from the fruits includes tribuloside and number of other glycosides of quercetin, kaempferol and isorhamnetin. It also consists of common phytosterols, such as, β -sitosterol, stigmasterol and cinnamic amide derivative, terestiamide.

Uses

The fruit has cooling, antiinflammatory, antiarthritic, diuretic, tonic, aphrodisiac properties. It is used in building immune system, in painful micturition, calculus affections and impotency. Improves and prolongs the duration of erection. It exerts a stimulating effect on reproductary organs.

Marketed Products

It is one of the ingredients of the preparations known as Bonnisan, Confido, Himplasia, Renalka (Himalaya), Dhatu-poushtik churna (Baidyanath), Semento (Aimil) and Body plus capsule (Jay Pranav Ayurvedic Pharmaceuticals).