Sisal

Agave sisalana

Sisal is a species of flowering plant native to southern Mexico, but widely cultivated and naturalized in many other countries. It yields a stiff fibre used in making rope and various other products. The term sisal may refer either to the plant's common name or the fibre, depending on the context.

The genus Agave is treated here in a wide sense to include taxa previously treated as belonging to the genera Manfreda, Prochnyanthes, Polianthes and Pseudobravoa. Not all botanists are happy with this treatment, with some feeling that these genera should remain distinct, at least until further studies have been carried out. In addition, given the high species diversity found in Agave, some feel that an alternative approach could be

the recognition of several smaller genera within the current circumscription of Agave.

Many Agave species have strong, sharp spines on the leaves and leaf tips.
In theory at least, the flowers, nectar, immature flowering stem and the centre of the rosette of all Agave species is edible and, with proper preparation, can provide a sweet, tasty foodstuff. Some species, however, contain relatively high levels of saponins (which makes them taste bitter) and some other compounds which can cause bellyache, and so these would only be eaten in times of desperation. In addition, many people may find these foods to be strongly laxative the first few times they eat them

Edible Uses

The heart of new shoots - cooked

The sap from the flower stalk is fermented to make an alcoholic drink

The roots are used in the production of an alcoholic beverage

Medicinal

Sisal is a folk remedy for dysentery, leprosy sores, and syphilis. It is a source of hecogenin

The leaves contain hecogenin used in the partial synthesis of the drug cortisone

Agroforestry Uses:

The plant is cultivated for fences as well as for protection against soil erosion

Short fibres from the leaves, obtained as by-products, are used for production of compost.

Other Uses

A high quality fibre is obtained from the leaves[
.The leaves provide one of the most important hard fibres, it is used for making ropes and all kinds of strings, fishing-nets, hammocks, door-curtains, floor-covers, bags etc
The fibre cannot be spun as finely as jute and ropes tend to break suddenly

. Short fibres, obtained as by-products, are used for production of cellulose, paper as well as for upholstery material
Fibres are also used to reinforce plaster boards and paper

The waste material, after extraction of the fibre, is reported to be molluscicidal and fungistatic and can be used as mulch for plants

The sharp leaf spines are traditionally used as needles