MORBYDICK

Asclepia fructicosa



Changing lives of rural farmers;

Farmers in many rural areas of Kenya now have something to smile about as they are able to generate some income from land that has been lying fallow. In many areas of Nyanza, Rift valley, and central Kenya regions farmers have taken to growing morbydick as an export flower.

Morbdick also known locally as Swan plant ,cotton bush or African milk weed due to its milky juice has been growing wildly in Siaya, Kisumu and South Nyanza(among the Luos its locally known as Obuo) but its economic potential in these areas is yet to be fully exploited.

The asclepia families with over 100 species orginate from Americas and, depending on the species, vary from perennials to small shrubs. Morbydick is a perennial that can grow for over three years under commercial setup.

Morbydick has strong stem, which is sometimes hollow. The stems are erect, straight, light green and tend to branch higher up only; turns grey to brown at maturity

The leaves are dull and narrow and after flowering it forms green seed bolls which are sharply pointed at the end and covered with short stout hairs. The plant may grow to reach up to 2 metres high. The juicy sap is poisonous but its leaves and roots have been used as medicine in some communities. Leaves are inflated green and later light brown, papery pod or follicle; short bristly hair cover the outer surface; dark seeds have silvery cotton woollike attachments that facilitate wind distribution

Roots; sometimes a taproot, but in hard ground a few main roots meander just below the surface of the ground.





Ecology

Morbydick is a common plant found in almost all eco zones with adequate rainfall

According to HCDA there are several varieties being grown in Kenya including small green bolls, big green bolls and small purple bolls. Currently, the small green boll variety is fetching better prices in the export market.

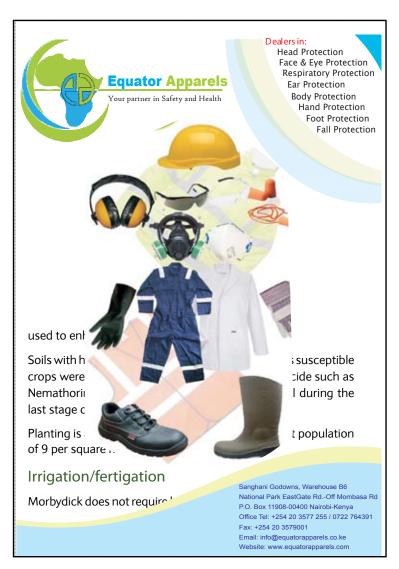
Propagation

It's sown from seeds in a nursery bed. After sowing the beds are mulched thinly to conserve moisture. It's recommended to keep the bed moist all the time till germination. From sowing to germination takes approximately 8 days depending on soil moisture content and temperatures.

Seeds availability is an issue affecting many farmers but FPEAK, HCDA, established farmers, produce marketers e.g. Wilmar Agro Ltd in Thika can be of help in sourcing of the seeds and marketing coordination. In Western Kenya seedling are available in several tree nurseries e.g. Adindi Tree seeds and Jaoflora flower seeds in Kisumu.

Transplanting

Done when the seedlings are between 20 to 25 cm high and not more than 30 cm high. Raised beds 1 metre wide are made prior. Raised beds enhance drainage thus reducing water logging which lead to root rots. The beds shoul may be free of weeds and of medium tilth. Morbydick is not a heavy feeder but it's recommended that fertilizer containing phosphates should be



purpose of irrigation is to ensure moisture availability to the crop. The crop can either be rain fed or drip irrigated depending on prevailing weather conditions.

Pinching.

This is done to ensure proper establishment of the crop. This is a critical stage as doing it the wrong time leads to either too thin stems or very thick stems which may not be sold. Pinching is done by cutting off the apical dominant bud when the crop attains a height of 60 to 100 cm or 8 to 10 weeks depending on stem size. Thick stems are pinch higher and thin ones pinch at lower stage.

Harvesting

The crop should be ready for harvesting between 18 and 24 weeks depending on climate, soil and planting region. The stems are harvested with the bolls and all leaves defoliated. Harvested stems do not require flower preservative solution. Harvesting period is an average of 4 weeks. After completion of harvesting the crop is pruned back to 40cm to 55cm depending on crop vigor.

Cutting stage

The aesthetic value is the boll. Ready bolls have soft hairs on them as opposed to the strong prickly hairs before maturity.



Grading.

Grading is done according to specific market requirements but varies from grades 52cm to 72 cm lengths. Harvested stems are washed to remove the milky juice and the bunched in groups of 10stems.

The flowers are ready for shipment the following day.

Pest and Disease

Notable diseases include Downey mildew, and black spots which are common during rainy periods. Broad spectrum fungicides such as OrtivaR and ScoreR among others are known to control these diseases effectively.

Too much water or cold cal lead to physiological disorder known as Purple Balls.

Serious pests' problems are White flies and nematodes.

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