VERNONIA

Ironweed

Vernonia galamensis Compositae

ECHO® PLANT INFORMATION SHEET

Origin

This oilseed plant originated from eastern Africa. Vernonia is grown in tropical locations that are within 20º of the equator because better seed is produced from flowers under short day conditions.

Uses

Vernonia is a potential industrial oilseed crop. After harvest, the seeds contain 38-40% oil and in the hydrolyzed form, 75-80%. When the epoxy oil is extracted from the fatty acids contained in the seeds, it can be added to PVC resins and protective coatings as a drying agent. Low viscosity Vernonia oil would allow it to be used as a nonvolatile ingredient in oil-based paints. This reduces pollution from paints because the oil (drying agent) will not evaporate into the air.

Cultivation

Vernonia is best suited to well-drained sandy soil that may be nutrient-poor. Added nitrogen will give an increased yield. It is extremely drought resistant, needing as little as 200-300 mm (8 in – 12 in) rainfall/season providing that the bulk of the wet season is spread over no more that three months. At a height of about 15 cm (6 in) the terminal bud can be snipped off to reduce the height of the mature plant and cause the seeds to ripen more uniformly.

Harvesting and Seed Production

Collect whole flowerheads by hand just as they open. Those on the stems will mature first but collection should wait until those on the branches are also mature. Dry seedheads out of the sun with good air circulation. Rub the very small seeds between the hands or over a sieve to remove hairs that cover the seed coat. Seeds will remain viable for five years when stored in a dry place.

Pests and Diseases

In trial plantings, there was no evidence of damage by insects, disease or nematodes.

Cooking and Nutrition

It is speculated that after oil is extracted, the meal might serve as livestock feed but no research has yet been done on that speculation.

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