

EGUSI MELON

EGUSI MELON Ibara, Wild Watermelon

Citrullus lanatus

Cucurbitaceae Gourd

ECHO® PLANT INFORMATION SHEET

Origin

In West Africa, the name Egusi is applied to members of the gourd family having seeds of high oil content. The Egusi Melons described here (Nigerian Ibara) are a subspecies of the watermelon species. Both Egusi Ibara and the watermelon are of tropical African origin.

Uses

Egusi Melon is cultivated in portions of West Africa, especially in Western Nigeria, for the food in the seed and as a crop interplanted with maize, cassava, or other crops.

Cultivation

Egusi Melon plants closely resemble watermelon plants; both have a non climbing creeping habit and deeply cut lobed leaves. The pulp of the watermelon fruit, however, is sweet and edible while the Egusi Melon has bitter and inedible fruit pulp. Egusi Melon seeds are larger than watermelon seeds, and they are light colored. Plant 2-3 seeds per hole, 1.5-2 cm (0.5-0.75 in) deep, in holes 1 m (3 ft) apart. Recommended planting time is in the month of May in Nigeria. Emergence occurs in 4-7 days. Four weeks after planting, flowering occurs and vines form a nearly complete ground cover, suppressing weed growth. Effective ground cover using Egusi Melon for crop interplanting may be achieved with 20,000 Egusi Melon plants per hectare. Weedings in primary crops like maize have been reduced from 2-3 weedings, to one, when interplanted with Egusi Melon. Yields are best on fertile humus rich loose soil. Egusi Melon tolerates dry to wet growing conditions but fruits mature only in dry conditions 4-5 months after sowing.

Harvesting and Seed Production

Harvest fruits after they stop enlarging; they will keep well for several months in storage. Seed removal from the solid pulp requires breaking the fruit with a hard stick (not a machete which will slice some of the seeds) and lying the pieces pulp side down on the soil for several days. During this time the pulp decays. Wash the seeds from the remaining pulp; allow the seeds to dry before storage. The seeds need to be dehulled before use as food. About half the weight of the seed is in the hull.

Pests and Diseases

Egusi Melon is relatively disease free in its native regions. Variegated locusts eat Egusi Melon seedlings. The beetles *Tribolium castaneum* and *Lasioderma serricorne* can seriously damage stored seeds. Seeds should be stored in well sealed container to prevent beetle damage.

Cooking and Nutrition

Dehulled seeds may be roasted for eating out of hand. Pounded roasted seed produces a paste with peanut butter like qualities, called ose oji, which may be spread on bread or mixed with other foods like kola nuts or eggplant. It also is added to soups and stews. A missionary in Ghana reports that machine blending of 200 mL (6/7 cc.) of water with 240 mL (1 c.) of dehulled seeds seasoned with a little honey and salt produced a mixture resembling the creaminess of mother's milk. This mixture could be used successfully as an infant food supplement if neither the mother nor cattle could provide adequate milk. Egusi Melon seeds are approximately 50% oil and 30% protein. They are good sources of the amino acids arginine, tryptophan, and methionine. Vitamins B1, B2, and niacin are well represented as well as the minerals sulfur, calcium, magnesium, manganese, potassium, iron, and zinc. The seed oil may be extracted for use in cooking. The residue after oil

extraction may be ground into meal to make a substitute for meat patties or a dry powder for use as a soup base. The young, tender leaves may be cooked and eaten as a potherb.