

COCOYAM



FAMILY

Araceae

BOTANICAL NAME

Xanthosoma sagittifolium
(L.) Schott.

COMMON NAMES

Tannia, New cocoyam,
Tanier, Yautia, Malanga,
Makabo, Amankani

Peter A. Y. Ampim and Dania Rivera-Ocasio

CULTIVATION

PERIOD

Plant immediately after last frost

PROPAGATION

Establish by vegetative propagation as seed formation is very rare. The central corm is the most commonly propagation material. They develop quicker so they should be planted separately. Cut pieces of the corm of 57-113 g. (2 to 4 oz.). Treat the cuts with lime and leave 4 to 8 hours to dry. Ground should be ploughed and raked, and mounds or ridges formed. Planting depth is 6 to 7 cm. (2.4-2.8 in). Planting distance is 0.9 to 1.3 m. (3-4.4 ft.) between rows and 40-60 cm. (15.7-23.6 in.) between plants. Cormels or mini corms can also be used for propagation.

GROWING CONDITIONS

Soil: Requires well drained soils. Soil pH: Acidic to neutral (5.5-7.0).
Temperature: Must exceed 20°C. Relative humidity: High. Water Requirement: 2.54 cm./week minimum.

CARING FOR THE GROWING PLANT

Water and weed control are critical for the first six months. Fertilize first month and five months after planting and control insects as necessary. In the long term, rotate with other crops to minimize disease occurrence.

DAYS TO MATURITY

It takes about nine to 11 months to mature.

AREAS COMMONLY CULTIVATED

South America, the Caribbean, West Africa, and tropical Asia

PLANT DESCRIPTION

Herbaceous perennial that has an edible corm or main underground stem. It can be 1.3 to 2.5 meters tall.

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HARVEST/YIELD POTENTIAL

Harvest 10 to 12 months after planting when leaves are turning yellow and beginning to dry. Harvest by hand. Optimum yields of corm are 25-37 MT/ha (10-15 ton/A). Store in aerated boxes. Fresh leaves and petioles of cocoyam can be harvested and eaten.

GROWING STEPS

Buy corms or cormels from a reliable source. Prepare your site or containers. Plant when conditions are optimum. Water as needed. Feed with fertilizer when plants are grown as specified above. Control weeds, diseases, and insects. Harvest when mature and store in aerated boxes.

POTENTIAL PESTS AND DISEASES

PESTS

Silver striped hawk moth (*Hippotion celerio*), armyworms (*Spodoptera litura*), taro beetle (*Papuana* spp.).

DISEASES

Dry disease (a complex produced by fungi), *Phytophthora* leaf blight, dasheen mosaic virus, *Pythium* spp., *Rhizoctonia* spp., and *Fusarium* spp. root rot blight complex, Alomae/Bobone Virus Disease Complex, *Cladosporium* leaf spot.

CULINARY USES

Cocoyam can be cooked, boiled, baked, steamed, mashed, or fried. It can also be used for stew, dried and processed into flour. Young leaves and petioles can be cooked and eaten like spinach.

NUTRITIONAL BENEFITS

Vitamins A, B₁, B₂, B₃, B₅, B₆, B₉, C, E, K. It also contains Ca, Fe, Mg, K, C, Na, Zn, Mn, and Se. It is reported to have more nutrients than other root and tuber crops like cassava, yam, and sweet potatoes.

REPORTED HEALTH BENEFITS

Supports cardiovascular, immune system, skin, digestive, and dental health. Prevents cancer and bone loss.

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