

Description

Agronomic adaptability

Hohrae 3 is suited to all elevations in Timor-Leste. Cuttings of 25-30 cm lengths (5 nodes) are generally planted with 2-3 nodes being buried in the soil. Sweet potatoes grow best on raised beds at 25-50 x 100 cm spacings, preferably with irrigation or at the beginning of the wet season. Harvesting should be after 3-4 months. Irrigation allows for planting and harvesting in every month of the year.

Storage

High yielding sweet potato clones do not store well in the ground. Unlike local varieties, roots of Hohrae 3 should be harvested at 3-4 months or when the soil cracks above the tuber. Their large roots often break the soil surface exposing the tubers to weevil damage. Once weevils attack the tuber, the sweet potatoes become very bitter. The tubers should be stored in low temperatures with high humidity. Hohrae 3 sweet potatoes can be stored for up to three months.

Disease, insect and pest reaction

Hohrae 3 is susceptible to the sweet potato weevil when not completely buried. It is also susceptible to the fungus disease leaf scab and the Mycoplasma causing little leaf. Plants showing little leaf symptoms should be removed from the paddocks and burned. Leaf scab causes the young leaves to curl upwards standing above the rest of the leaves. It is not known to cause a reduction of yield.

Yield and root quality

Name	Hohrae 3	Local
Yield (t/ha) (mean 2001-2012)	15.8	6.8
Yield advantage over local varieties (%)	132	-
Protein (%)	0.9	0.9
Vitamin A (%)	1200 mg/100g	0



Interested in getting cuttings?

Please contact the MAF Office in your district

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SWEET POTATO VARIETY

HOHRAE 3



HOHRAE 3 has:

- a short growing season (3-4 months)
- a sweet taste
- high yields, 13.5t/ha
- a 132% yield advantage over local varieties
- large white tubers

HOHRAE 3 — INCREASING SWEET POTATO PRODUCTION IN TIMOR-LESTE

Variety information

Release name	Hohrae 3
Year released	2007
Evaluation name	CIP-7
Botanical name	<i>Ipomea batatas</i> L.
Suited environment	Upland areas with average temperatures of 24°C
Breeding number	BB9702.1
Parents	B0053-9 x AB94004
Breeder	International Potato Centre (CIP)



Background

The sweet potato is an extremely important crop in Timor-Leste for both food security and nutrition. It grows well in a range of soils where it is generally cultivated with little or no fertiliser. The trials conducted by MAF-SoL from 2000 to now show that Hohrae 3 produces good results compared with other varieties. This variety was introduced from CIP in Indonesia.

Description

Immature leaf colour	Green with purple veins on lower surface
Petiole pigmentation	Green with purple at both ends
Predominant colour of vine	Green with many purple spots
Secondary colour of vine	Purple nodes
Abaxial leaf vine pigmentation	All vines mostly purple
Storage root skin colour	Red
Storage root flesh colour	Intermediate orange



Impacts

Economic benefits

Cuttings of Hohrae 3 are in high demand because of their high yield. There is a competitive advantage to growing sweet varieties with large sized roots.



Social benefits

Planting this variety brings health benefits because there are larger amounts available to eat and the tubers are nutritious (high levels of vitamin A). The risk level of growing improved clones is similar to that of growing traditional varieties.

Environmental benefits

Through planting new sweet potato varieties, farming families help improve genetic diversity within Timor-Leste. None of the new clones are genetically modified organisms (GMO). Sweet potatoes tend to be environmentally friendly because of the low inputs required, especially nitrogen. They also grow quickly and cover the ground surface thus preventing erosion. Seed producers are currently multiplying cuttings of existing new sweet potato varieties for extension to farmers.