

# **TAPIOCA**

By  
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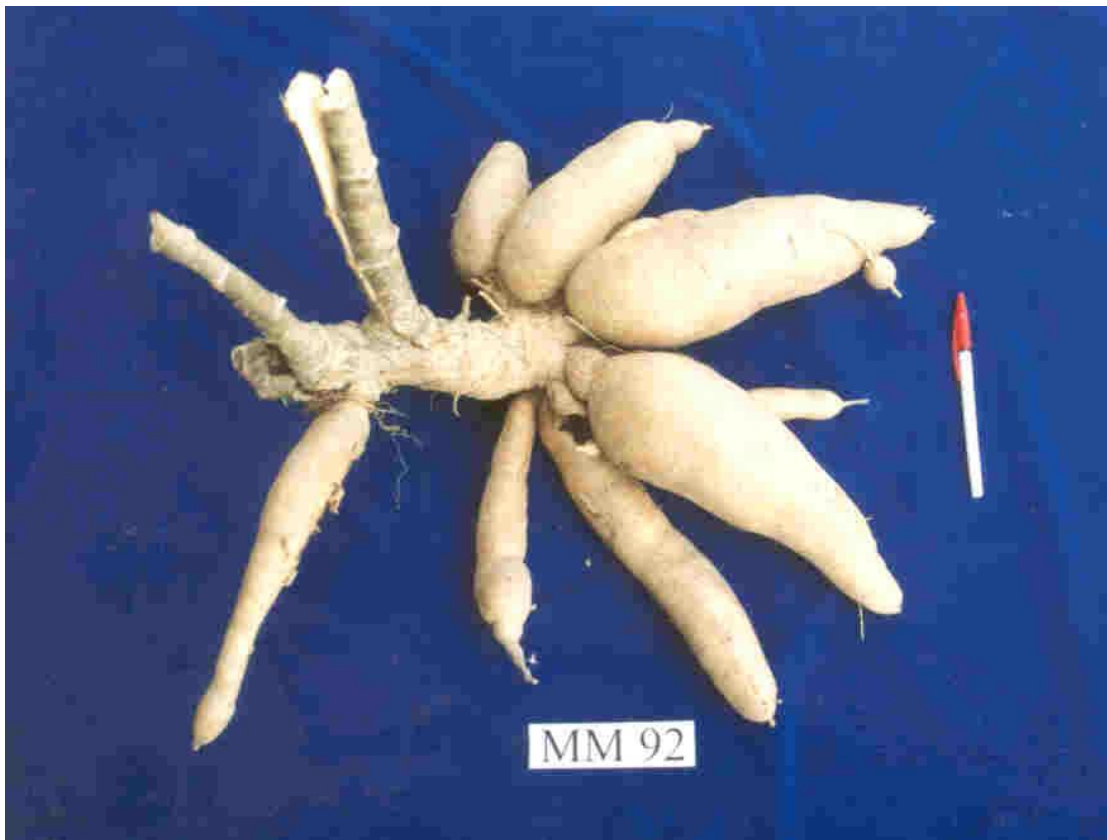
## **Introduction**

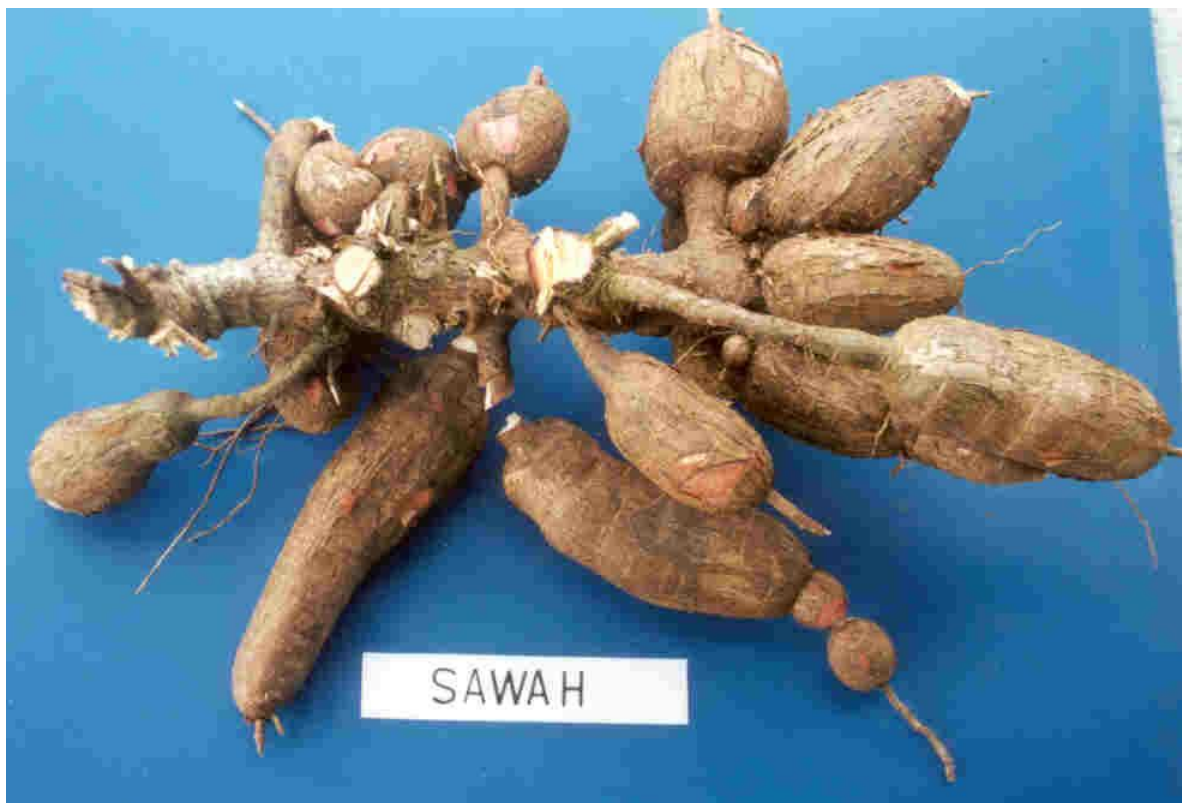
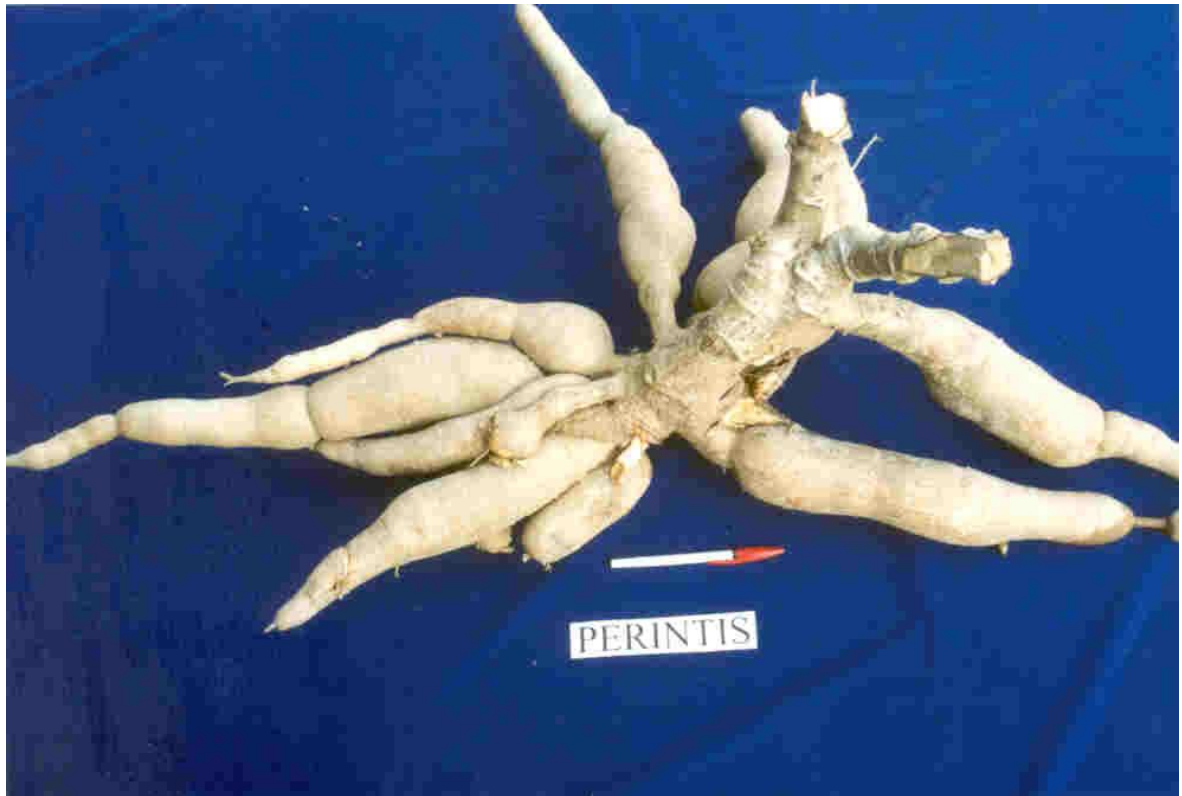
Tapioca ( *Mannihot esculenta* Crantz ) probably originated from tropical America and was introduced to other tropical regions during the 17<sup>th</sup> century by the Portugese. It is a dicot belonging to the family Euphorbiaceae. In Sarawak tapioca sometimes intercropped with hill padi in subsistence farming. Only recently there is an attempt by the private sector to go into big scale planting but still in preliminary stages.

## **Research on Tapioca Varieties**

Studies done by the Research Division of the Department of Agriculture Sarawak on both sweet and bitter types of tapioca had revealed that the 'Perintis' and 'MM92', both bitter type varieties produced higher yields compared to the other varieties. Both varieties were obtained from MARDI in Peninsular Malaysia.

As for the sweet type varieties, it was found that 'Sawah' variety is better than the other varieties studied. This variety is suitable eaten boiled or baked into cakes. The 'Putih' variety is suitable for making tapioca chips.







**Plant characteristic of 'Perintis', 'MM92', 'Sawah' and Putih**

	<b>Variety</b>			
	<b>Perintis</b>	<b>MM92</b>	<b>Sawah</b>	<b>Putih</b>
Plant habit	Intermediate branching, once	Intermediate branching, once	Intermediate branching, twice	No branching
Mature stem colour	Greyish white	Light brown with reddish leaf scars	Brownish	Brownish white
Colour of young shoot	Purplish	Brownish light green	Brownish light green	Light green
Leaf lobe shape	Narrow, obovate	Broadly, obovate	Broadly obovate	Broadly obovate
Leaf lobe number	5-7	7	5-7	5-7
Colour of leaf lamina	Green	Green	Green	Green
Colour of petiole	Reddish green	Almost completely red	red	Light green
Tuber skin	Rough	Smooth to slightly rough	Rough	Smooth to slightly rough
Tuber skin colour	Light brown	Light brown	Brownish	Light brown
Tuber flesh colour	Yellowish white	Creamy	White	Yellowish white
Plant height (m)	1.5-3.0	1.5-3.0	2.5 – 3.5	2.0 – 3.0
Mature	10-12 months	6-12 months	10-12 months	10-12 months
Yield ( mt/ha )	30.0 – 40.0	30.0 – 40.0	20.0 – 30.0	20.0 – 30.0
Uses	Starch	Starch	Fresh consumption	Chips

**Nutrients Content of 'Sawah', 'MM92', 'Putih' and 'Perintis' on Dry Matter Basis**

	<b>Variety</b>			
	<b>Sawah</b>	<b>MM92</b>	<b>Putih</b>	<b>Perintis</b>
Crude Fibre ( % )	0.92	1.73	1.12	5.22
Fat ( % )	0.70	0.45	0.28	1.22
Carbohydrate ( % )	95.82	95.13	96.04	90.82
Protein ( % )	0.89	0.97	0.99	1.25

