
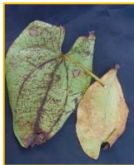

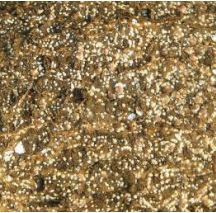




## Crop Farmer's Guide for Uvi

YAM ( <i>Dioscorea alata</i> )	Spacing	Fertilizer/ Manure	Weed Control/ Management	Disease Control/ Management	Insect Control/ Management	Harvest/ Yield/ Food Value	Disaster Risk and Climate Change Tips
<p><b>Recommended varieties:</b> -</p> <p><b>Early varieties for all Zones:</b> - Lokaloka, Vurai Balavu, Vurai Leka and Yasawa;</p> <p><b>Late varieties for all Zones:</b> - Beka, Damuni, Filipai White, Filipai Yellow, Futuna, Kivi, Murapoi, Taniela Vula Leka and Veiwa; and</p> <p><b>Late varieties for Dry and Intermediate Zones:</b> - Beka, Damuni, Filipai White, Filipai Yellow, Futuna, Kivi, Murapoi, Niudamu, Taniela Vula Balavu and Taniela Vula Leka.</p> <p><b>Seed Rate:</b> - Ridges: - 4.2 tonnes/ha (16.670 setts/ha)  Mounds: - 3.1 tonnes/ha (12.500 mounds/ha)</p> <p><b>Planting time:</b> - Early varieties: - between June &amp; July  Late varieties: - between August to September.</p>	<p><b>Ridge:</b> - 1m x 50cm  <b>Mounds:</b> - 1m x 0.8m</p>	<p>Soil analysis should be done before planting.</p> <p><b>a. Before planting:</b> - 1. Poultry manure; - Apply 10-12 tons/ha 1 week before planting.</p> <p><b>b. At planting:</b> - 1. Super phosphate @ 200kg/ha; and 2. Murate of potash @ 200kg/ha.</p> <p><b>c. After planting:</b> - 1. Urea @ 200kg/ha in 3 split applications at 8, 12 and 16 weeks.</p>	<p>- Apply pre-emergence Altrazine @ 120ml/15L water.</p> <p>- Hand weeding is highly recommended.</p> <p>- Ensure yams are properly trellised and staked for proper weed control.</p> <p>- Use spray shield.</p> <p>- Avoid touching crop plants.</p>	<p><b>1. Yam Anthracnose or Dieback Disease</b></p> <p><b>Cause:</b> - by the fungus <i>Colletotrichum gloeosporioides</i>.</p> <p><b>Symptoms:</b> - symptoms vary according to the age of the leaf, the amount of rain and the variety of yam.</p> <p>- Mild infection leads to very small brown spots on young leaves. </p> <p>- These spots become larger as the leaves approach full size, and they may develop pale yellow margins</p> <p>- Infected leaves usually fall off. In some varieties, the veins on the underside of the leaf become black where they have been infected. </p> <p>- If this occurs as the leaves are expanding, they may become cup-shaped and twisted. The 'wings' on the stems may also become infected.</p>	<p><b>Tuber Scale</b></p>  <p>The scale insect damages stored yams. Large numbers turn the yams light grey</p> <p>The scale is an armoured species, so-called because it makes a hard covering over its body. </p> <p><b>Symptoms:</b> - The scales have long tube-like mouthparts that pierce the skin of the yam tubers and feed on the flesh beneath.</p>	<p>Depending on the variety, yams are harvested 6 to 12 months after planting.</p> <p>a. <b>Early varieties:</b> - - 14 - 15 tonnes/ha</p> <p>b. <b>Late varieties:</b> - - 16 - 18 tonnes/ha</p> <p>Lift the tubers when the vines turn brown and dies.</p> <p>Yams can be stored 3 months (<i>lesser yams</i>) or 6 months (<i>greater yams</i>) after the harvest.</p> <p><b>Food Value of Yams:</b></p> <p>Yams are not only an excellent source of fiber but also high in potassium and manganese, which are important for supporting bone health, growth, metabolism, and heart function.</p>	<p>Yams can be a good source of food during and after a natural disaster, as it can stay edible for a long time.</p> <p><b>Health Benefits of Yams:</b> - Yams:</p> <ol style="list-style-type: none"> <li>1. Are packed with the following nutrition: -</li> <li>a. Vitamins;</li> <li>b. Minerals;</li> <li>c. Fiber;</li> <li>d. Potassium; and</li> <li>e. Manganese.</li> <li>2. May enhance brain function.</li> <li>3. May ease symptoms of menopause.</li> <li>4. May have cancer-fighting properties.</li> <li>5. May reduce inflammation.</li> <li>6. May improve blood sugar control.</li> </ol>

				<p><b>Control:</b> -</p> <ol style="list-style-type: none"> <li>1. Grow resistant varieties.</li> <li>2. Select tubers from uninfected plants.</li> <li>3. Ensure that planting setts are pathogen free.</li> <li>4. Removal of weeds.</li> <li>5. Provide early staking.</li> <li>6. Planting barrier crops (e.g. maize)</li> <li>7. Avoid damaging tubers at harvest.</li> <li>8. Practice crop rotation.</li> <li>9. Spray: - <ol style="list-style-type: none"> <li>a. Mancozeb at 50g/15L of water (if need be); and</li> <li>b. Apply Benomyl at 15g/15L of water, two weeks interval (sold as Benlate).</li> </ol> </li> </ol> <p><b>2. Dioscorea Leaf Spot</b></p> <p><b>Cause:</b> - caused by fungus <i>Pseudophloeospora dioscoreae</i>. The spread of the disease occurs when the spores ooze from the fruit bodies during wet weather and are splashed by rain or carried in the wind.</p>	<p>When large numbers of scales are present the yams become fibrous and this affects their quality.</p> <p><b>Control:</b> -</p> <ol style="list-style-type: none"> <li>1. Use clean planting materials.</li> <li>2. Practice crop rotation.</li> <li>3. Dipping of planting material in Diazinon at 60ml/15L of water before planting.</li> <li>4. Check surface of the yams before they are stored.</li> <li>5. Inspect yams in storage regularly and remove those that become infested with the scale.</li> </ol>	<p>Yams also provide decent amounts of other micronutrients, such as copper and vitamin C. Copper is vital for red blood cell production and iron absorption, while vitamin C is a strong antioxidant that can boost your immune system</p>	
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				<p>dry rot, that continues in storage.</p> <p><b>Control:</b> -</p> <ol style="list-style-type: none"> <li>1. Allow the land to fallow naturally.</li> <li>2. Plant marigolds or cover crops, e.g., green panic (<i>Panicum maximum</i>), siratro (<i>Macroptilium atropurpureum</i>) or velvet bean, <i>Mucuna</i> sp.</li> <li>3. Do not store tubers with signs of dry rot.</li> <li>4. Regularly inspect tubers in storage; remove those with dry rot.</li> <li>5. Use bleach to clean the knife used to trim the suckers, especially if the knife has been used to cut out rots.</li> <li>6. Treat wounded end of seeds with Mancozeb at 50g/15L water; or Benomyl at 15g/15L of water (sold as Benlate).</li> </ol>			
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(Reference: - MOA Farmer's Guide – A Farmer's Guide to a Better Harvest and SPC - Plant Protection Service, Pest Advisory Leaflet No.12. Revised 2002, Pacific Pests, Pathogens and Weeds)

[https://www.healthline.com/nutrition/yam-benefits#TOC\\_TITLE\\_HDR\\_3](https://www.healthline.com/nutrition/yam-benefits#TOC_TITLE_HDR_3)