36056 and 36057.

From Mount Silinda, Melsetter, South Rhodesia. Presented by Dr. W. L. Thompson, American Board Mission in South Africa. Received August 11, 1913.

36056. IPOMOEA BATATAS (L.) Poir. **Sweet potato.**

"(No. 1.) Very vigorous, and with us here a very satisfactory variety. They are the opposite of vineless, making exceptionally long vines. The tubers form more quickly than many of our varieties here, and are good size, good shape, and good eating qualities. One peculiarity I have not noticed in any other red sweet potatoes, if boiled and the thin skin stripped off, they are still red under the skin, though just below the surface they are a rich golden yellow." (*Thompson.*)

36057. COLOCASIA sp.

"(No. 2.) An arum, called here *Amadumba*, which we prize as a vegetable. I suppose it must be of the same family as the dasheen. This is the best by far that we have here, though several other varieties are eaten." (*Thompson.*)

"The plants of this dasheen are much like those of the Trinidad variety, except that the petioles of the former are shaded the entire length with maroon." (*R. A. Young.*)

36058. NYPA FRUTICANS Wurmb. Nipa palm.

From Manila, Philippine Islands. Presented by Mr. O. W. Barrett, chief, Division of Horticulture, Bureau of Agriculture. Received August 11, 1913.

"The nipa is an erect, stemless palm of which the leaves and inflorescence rise from a branched rootstock, the leaves running from 9 to 20 feet in length. It grows along the tidal marshes of rivers in low, wet lands subject to overflows of brackish water as the tides rise each day, and it will not thrive where either fresh or sea water alone is available. Nipa swamps of considerable size occur in practically all the Philippines, and inasmuch as they occur in lands which otherwise are useless or almost without value, the cultivation of nipa palms where they are cultivated, or the presence of nipa trees wild where not cultivated, affords a profitable crop on little original outlay.

"The nipa palm is one of the most useful plants in the Philippines or other tropical countries. Its uses are outlined in the report of the Philippine Internal Revenue, as follows: 'Of the leaf, the leaflets are used in the manufacture of shingles for house building, hats, mats, and bags, pails for dipping water, and for coarse baskets; the midribs for brooms, tying rice bundles, and for sewing nipa shingles; and the stalk for fuel, for floating logs, and as material for sewing shingles; the fruit is used as food and sweet meats; and the sap is used fresh as a drink, fermented (tuba) as a drink, and for the manufacture of sugar, alcohol, and vinegar.'

"The chief use of the plant, however, aside from the use of the fiber for hats and various articles, is in the use of the sap for the manufacture of alcohol and native drinks. From the sap come all the possibilities of sugar making. The report of the bureau shows the cost of producing alcohol from the nipa paka as 2.7 cents gold per liter (1.05 quarts) as compared with 5.8 cents per liter for alcohol from sugar beets at $5 per ton; 5 cents for alcohol from sugar cane at $3.25 per ton; 3.4 cents from cassava at $5 per ton; 6.6 cents from corn at 70 cents per 56-pound bushel, and similar costs from other sources. The reports claim that alcohol can be made more cheaply from the nipa palm than from any other material. Moreover, the sap ferments with unusual rapidity, so that in less than 20 hours the liquor is ready to be poured into the stills. There is one distillery in the Philippines which is now producing 93 per cent alcohol 186 proof at a cost of 10 centavos, or 5 cents gold per liter on a 12-hour run at the distillery, and on a 24-hour basis with a little reorganization it is known that the alcohol can be manufactured at present in this establishment at 3.5 to 3.75 cents gold per liter.