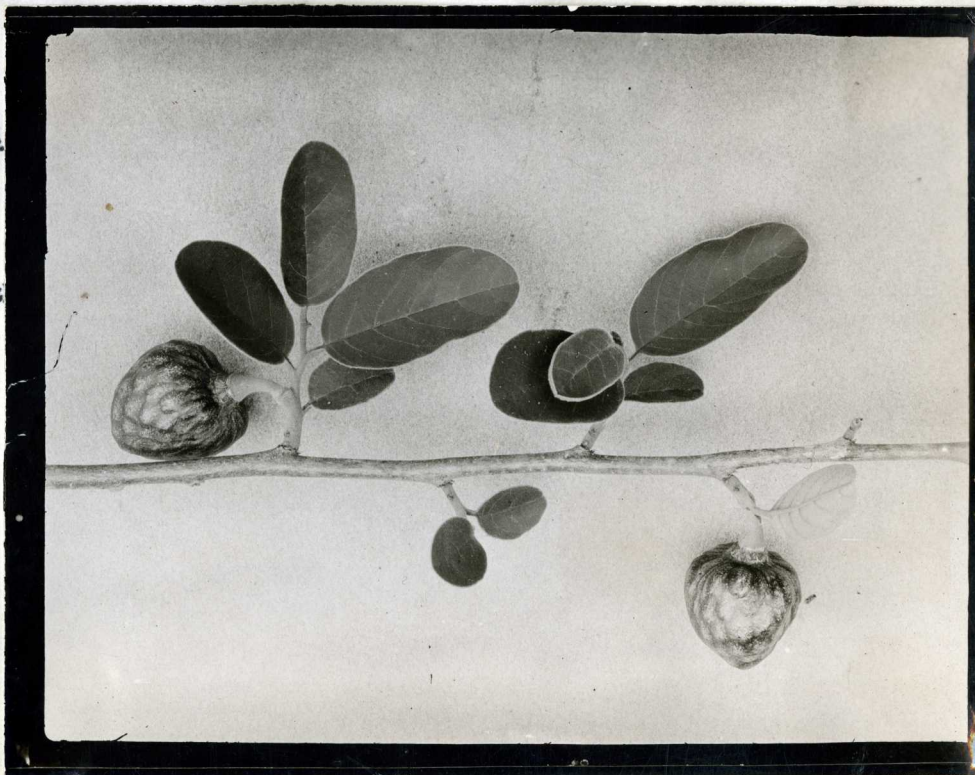


B<sup>2</sup>-6. A single plant of Protea abyssinica (?), S.P.I. 49465. See Herb. 463. This tree grows on relatively poor land and often the tree presents a somewhat damaged appearance due to the fact that the old fruiting cones remain on the tree for some time.

B<sup>2</sup>- 7, blank.

December 3, 1919. During early morning fruits and flowers placed in press and photographs taken as follows:

B<sup>2</sup>-8. 128 -  
1/2 natural size.  
Annona senegalensis.  
Shows leaves and  
fruits. Latter not  
yet ripe. This  
plant first noticed  
at Bulawayo and north  
ward. Especially  
abundant at Kafue.  
Regarded as good  
fruit by natives.  
No seeds secured as  
fruits were not  
ripe. Hope to se-  
cure them later by  
correspondence.  
Seeds afterwards se-  
cured in Uganda and  
on Tanganyika.



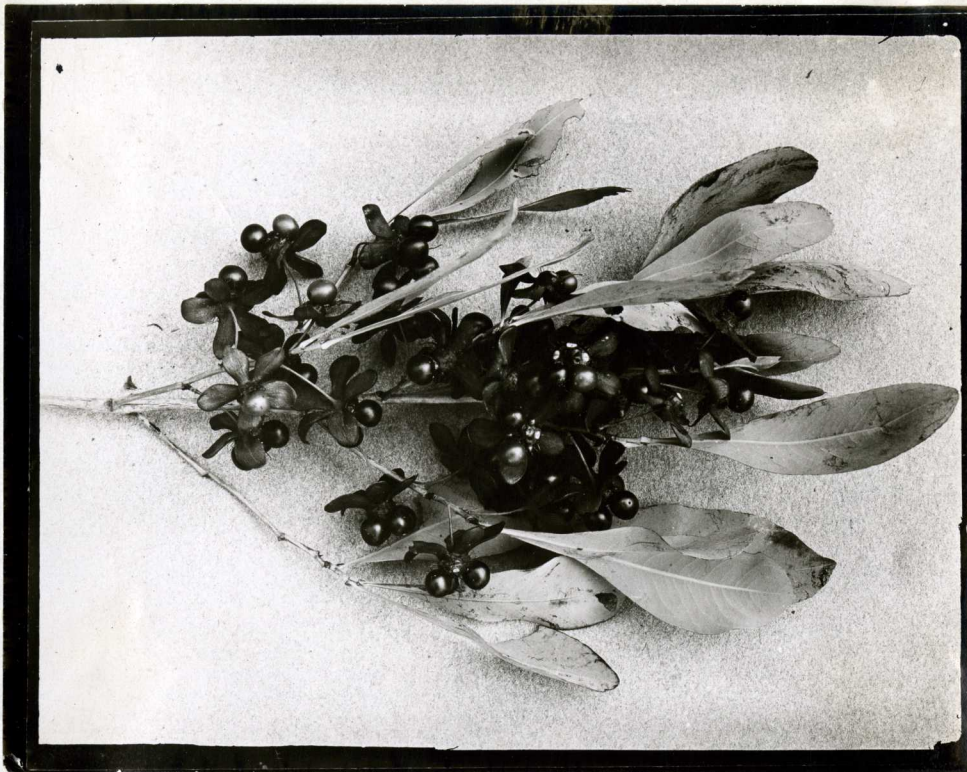


B<sup>2</sup>-9. (Photo.No. 36823) S. P. I. 49465, Protea abyssinica (?), common name mushokoto. Detail of flower bud and leaf. See also photo. 36821, and Herb. 463.



B<sup>2</sup>-10. Ochna, S.P.I. 49595, (photo. 36824) a beautiful tree 8-12 feet high, with yellow sepals and receptacle and black shiny carpels. See Herb. 464.





B<sup>2</sup>-11. Photo. 36825. S.P.I. 49596. Detail of Ochna, 1-2 feet high. Deep red calyx. In general appearance this plant forms a deep red mass with silvery outer fringe of leaves.

no neg

B<sup>2</sup>-12. 128 -2 sec. 1/2 natural size. S.P.I. 49608. Photo. 36826. Maululu (Cantheum lanciflorum) A light brown fruit called a plum. One of the best fruits of this section.



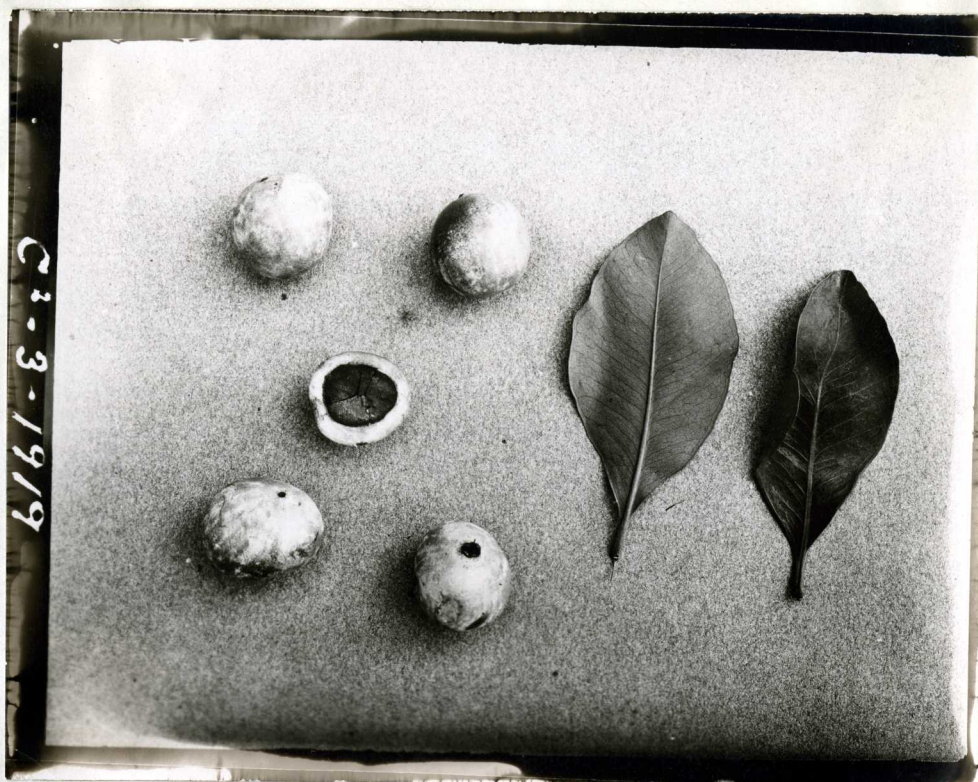


C<sup>2</sup>-1. A cucurbit. Edible, with a *mammillaria* over lower fruit. Red pulp. Sent in as my number 344. Apparently never received or no number assigned. The fruit when broken open looks like a gorgeous flower with orange-yellow pod and brilliant scarlet pulp. See Herb. 467.

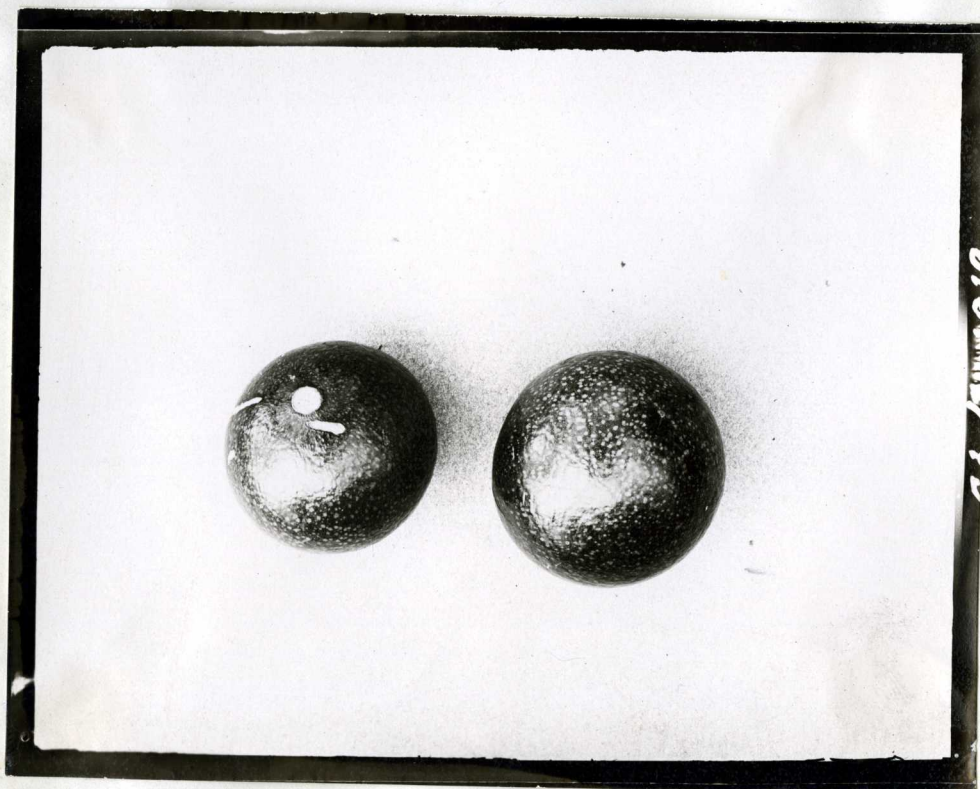


C<sup>2</sup>-2. 1/2 natural size. S.P.I. 49603. Photo. 36828. Ximenia americana, called impingi. These are relatively small fruits. Produce an excellent oil. Have a strong flavor of wild cherry.





C<sup>2</sup>-3. (Photo 36829) S.P.I. 49461, Musafa (*Caryophyllus jambos*.) 1/2 natural size. A small tree bearing a heavy crop of almost white, very spicy fruits. Very pleasant taste and crisp texture. The seed is unusually large. The fruit is about 1 inch in diameter and a greenish-yellow white in color.



C<sup>2</sup>-4. 128 - 2 minutes. 1/2 natural size. This is Strychnos, Kaffir orange, S.P.I. 49599, a Strychnos of smaller size than those usually found in this section, but seems to have a much better flavor. Relished by the natives.

Between a lime and orange color with strong rind and yellowish-brown



inside, rather juicy. Seeds pulp-covered. The flavor is unlike that of any fruit I have ever eaten. It is much easier to eat than an orange and I would say as agreeable to the taste. Bears a heavy crop and apparently would be an excellent keeper. In eating this fruit the seeds are rejected as in eating the pomegranite. I think this fruit is well worth trying out in cultivation. The natives are so addicted to eating one thing, such as mealie meal, that fruit is not as sought after as one would suppose. This probably accounts for the fact that I found many of these ripe fruits on and under the trees.

*not meg*

C<sup>2</sup>-5. Similar to C<sup>2</sup>-4, but one of the fruits cut open. The pulp is yellowish-brown when ripe and much easier to eat than an orange. The small type is said to be better than the larger type. Care should be exercised not to attempt eating this fruit when too green. I found the fruit to taste best when the whole central mass is reduced to soft juicy pulp of yellowish-brown color.

The old fruits are some times fermented. These of course have gone too far in the ripening process. This photograph shows very well the almost stone-like rind which enables one to throw them about without damage to the fruit.



S.P.I. 49599. A small *Strychnos*. See C<sup>2</sup>-4 and C<sup>2</sup>-5.

S.P.I. 49600. Large *Strychnos*. See Z<sup>1</sup>-12.

S.P.I. 49468. *Zea mays*. Mealies or corn grown by the natives south of Kafue by a Nyassaland man with a Massokulumba wife. Said to be a small early-maturing type planted when rains first come. Usually planted on anthills or small alluvial spots. Very severe drought this year. Recently have had about 6 inches of rain, and this seems to indicate corn and Kaffir corn failure.

S.P.I. 49463. *Holcus sorghum*. Kaffir corn. Dark, rapid-growing and early-maturing.

S.P.I. 49464. A white Kaffir corn.

S.P.I. 49584. *Cucurbita maxima*. A white pumpkin of the ordinary type. My number 316.

S.P.I. 49591. *Langenaria vulgaris*. A small native pumpkin. Boiled usually and used as a vegetable.

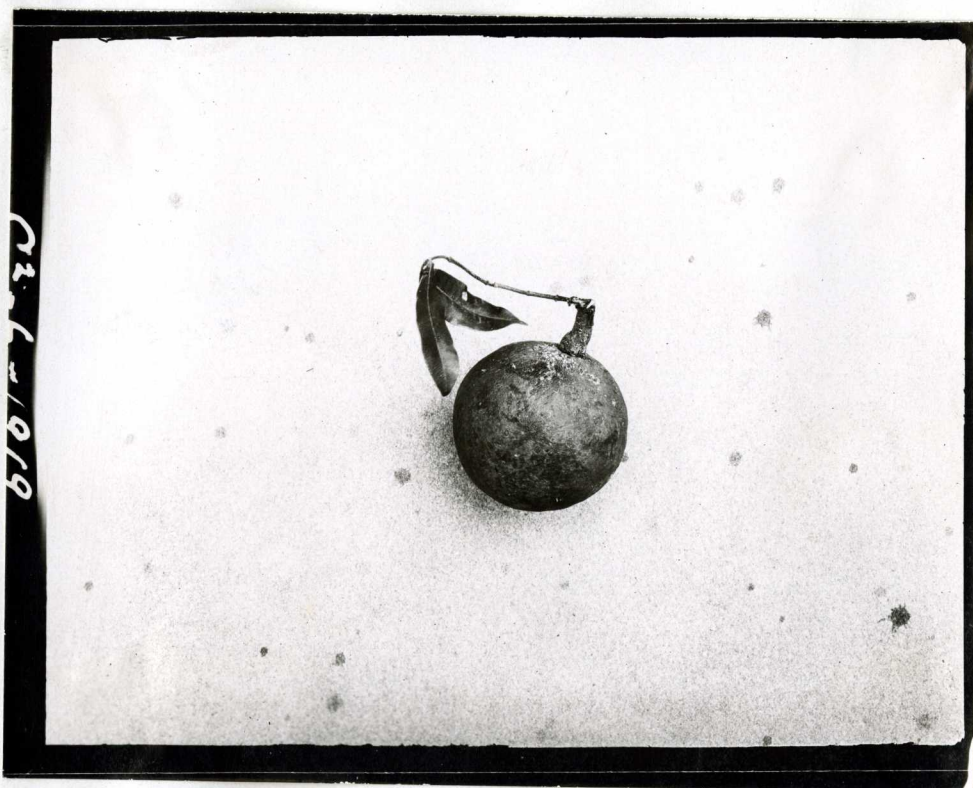
Note.-- These crops were not growing at the time the seeds were collected. S.P.I. 49591 should be exceptionally interesting. Practically all pumpkins are stewed green and eaten as a vegetable, but this number seems especially adapted to this use. All of these numbers have been grown by the natives, who keep seed from year to year in little granaries elevated a few feet from the ground on poles and plastered over with red clay. When the rains come the plants are put into the ground, or if near the river where a water supply can be secured and added by buckets or gourds, they may be planted at any time. On the upland the seeds are put in at the first rain and harvested in February or March. Kaffir and millets are stored for long periods for food.

S. P.I. 49608. *Cantheum lanciflorum* Hiern., known as manlulu. See Herb. 466, B<sup>2</sup>-3, C<sup>2</sup>-1, also color sketches. This is probably the best fruit seen on the trip so far. The green fruit collected ripened rapidly and were good to eat the next day. When green the fruit is a fresh green color, and



turns on ripening to almost chocolate brown. The flavor is decidedly spicy and sweetish but very pleasant, especially on second taste. This should be given a serious trial, since it bears heavily and is regarded by all white settlers as of the very best quality. The trees are 6-10 feet high and are quite abundant on the thinner soils or in old fields. Dr. Bequaert, who spent much time in Katanga, states that this fruit is quite abundant along the southern Katanga.

S. P. I. 49461. Caryophyllus jambos. C<sup>2</sup>-3, also color sketch.



C<sup>2</sup>-6 (36833) S.P.I. 49609. Undetermined. Known by the natives as nipila. This fruit is eaten by the natives. It is greenish with purple upper side and rather coarse peridermis. Fruit is milky, filled with seeds, sour, tastes very much like lime or more nearly like tamarind. Seeds surrounded by pulp light-colored and more or less fibrous. These seeds are placed in a pot of water by the natives and a drink made which is very much like lemonade. 1/2 natural size.

S.P.I. 49604. *Ximenia americana*, see C<sup>2</sup>-2 (49467).

S.P.I. 49467, see Z<sup>1</sup>-3.

S.P.I. 49477, see Z<sup>1</sup>-2, *Alotandra*, Herb. 442, also sketch.



S.P.I. 49478. Differs from the above in having pure white flower which appears singly above the style.

S.P.I. 49479. *Lissichilus*. Herb. 441, see Y<sup>1</sup>-12, Z<sup>1</sup>-1, Z<sup>1</sup>-9.

S.P.I. 49586. *Diospyros senegalensis*, X<sup>1</sup>-8, and Herb. 435.

S.P.I. 49587, X<sup>1</sup>-7.

S.P.I. 49169 and S.P.I. 49462, *Garcinia*, see Z<sup>1</sup>-7.

December 6, 1919. Out on a long trip south of the camp, on which I saw little of special interest except a *Gloriosa* lily of which I secured three corms (my number 322, Herb. 470, *Gloriosa virescens*), also see sketch. A very handsome lily which often grows to a height of 10-12 feet.

S.P.I. 49594, *Gossipium* sp., see Herb. 468. A tree of considerable size about 6 feet high, with rough bark. Leaves similar to cotton and fruit also, but with brown lint. Have seen several of these but none in flower.

Note.-- This plant has proven of special interest to Mr. Lewton, who regards it as entirely new thing and we are endeavoring to secure new seeds of it.

December 7, 1919. S.P.I. 49595, *Ochna*. See B<sup>2</sup>-10 and Herb. 464.

S.P.I. 49596, *Ochna*. See B<sup>2</sup>-5 and B<sup>2</sup>-11, Herb. 465, my number 328, *Sansiveria*, known locally in the Masskulumba language as musuka, inchinyanja m'gonji. This is relatively tall round-leaf type. Very valuable as fiber plant. Is used by natives chiefly in making fishing line. Attempts have been made to use it in place of sisal. See Z<sup>1</sup>-3 and Z<sup>1</sup>-4. My number 329, *Sansiveria*, with heavy short, flat leaf and short spike about 1 foot high. Have seen only one plant in flower.

Shantz 330. A fruit of *Adansonia digitata*, the baobab tree. Seeds surrounded by a dry white powdery pulp which is eaten by the natives and also