

subrosa at Dembo and on the Kuvango.

Albizzia lebbeck, S.P.I. 49956. Grown abundantly in Kafue as a street tree.

Bertiera resembles closely the black-fruited vine collected at Victoria Falls as Herb. 424 and S.P.I. 49166, identified as Thunbergia later.

Several species of Ochna occur.

Buettneri at Djima. Ochna gillettiana at Sanda. O. hoffmanni-Ottonis at Lumene.

Millettia resembles ~~a~~ very closely Brachystegia and has a large hairy pod. It is possible that this is one of the forms collected at Victoria Falls.

Anona klainei collected at Moanda and A. marmii at Sankuru, Madinki, Kisantu, etc. A. senegalensis at Kisantu.

Anthocleista auriculata may possibly be the large tree at Elizabethville.

December 28, 1919.



G²-3. Datura suaveolens. One of the beautiful decorative plants grown in the parks at Elizabethville. The plant is about 6 feet high, flowers 8 inches long, occasionally yellowish.



G²-4. Delonix regia. The most beautiful tree in all Africa. Flat top with great green leaves reminding one somewhat of ostrich plumes, producing immense clusters of bright red flowers. At the left is shown Phytolacca abyssinica, a prominent street tree. It is more ant-resisting than Delonix but not as good as Jacaranda. The Belgian church is shown in the background. Taken in one of the city parks.



G²-5. A general view in the park at Elizabethville. Shows the large banana, Enseta, at the right, beds of roses, croton, Jacaranda, Mimosifolia, and Delonix are the principal street trees. They also grow dahlia and canna.



G²-6. Setaria aurea. One of the principal ruderal grasses at the sides of the road. The Congo mission is shown in the background. Banana and Brachystegia are the trees at the right. A small yellow Setaria-like grass not yet satisfactorily identified.



G²-7. Citypark in Elizabethville. Huge trees on termite hills 20 feet high. Ochna and the common greenhouse variety of begonia on these anthills.



G²-8. A large anthill used as a brick kiln. The kiln is 16 x 20, and 16 feet high. Although it has been used repeatedly for burning brick, the vegetation is luxuriant on the outside.



G²-9. Detail view of inside of kiln. Shows 16 x 20 interior and 16 feet high.



G²-10. A view of the golf course at Elizabethville. Termit hills and relatively large trees. Cinders are used to make putting greens.



G²-11. Similar to G²-10, but shows club house in the background. On the morning the photographs were taken there were fresh lion tracks on the putting green.



G²-12. A general view at the experiment station. Soil temperatures were taken at the left. Here are also sunlight recorders, barometer house in the background. Records were taken there of direction and rate of wind, of evaporation by Fess apparatus, wet and dry bulb determinations, also air temperatures. Many instruments were stopped temporarily on account of lack of paper on which to make records.

H²-1. Is a general view of the office of the Director of Agriculture, M. De Neuter, taken from the roadway. The trees are Cupressus microcarpa. Phytolacca is also shown. Wind-recording instruments on the roof.





H²-2. A view of evergreen plantation. Cupressus microcarpa at the left. C. sempervirens, C. pyramides, and C. elegans.



H²-3. Shows the effect of termites on Eucalyptus rostrata. The stem is 3 inches in diameter. The bark has all been eaten off and the tree is dead.



H²-4. A general view. Shows the grass cover. See Herb. 493-510. Shrub-like plants in the foreground are small trees. Little or no shrub growth in this climate. This is typical of the dry forest.



H²-5. General view, shows Brachystegia mahobohobo and grass cover.

Note--There is little variation in the vegetation about Elizabethville. All the trees are alike in habit and color of stem and bark. They differ chiefly in leaf and flower and to some extent in fruit. Practically all are leguminous pods 1 inch wide, 1/4 inch thick and 4-6 inches long. Branches spread out at tip forming loose canopy and are never crowded, but are equally spaced. The ground cover consists of grasses which are not tall, ranging 1-4 feet. A good many plants of Cypress and Bulbostylis. At this time mushrooms are abundant.. There are a number of Russula-like amonitas, and some very large white-spored forms which have a very well developed veil. They are often a foot or more in diameter. There are many clavarias. Ferns are not abundant except the sword fern on the ant hills. Dryopteris-like fern on the ant hills.

Pteridium, which grows every where as a ruderal. There is almost no display of flowers and fruits at this time of year. The season varies considerably, the trees usually pushing into flower and many of the herbs and bulbous plants coming into leaf and flower just before the rainy season or at the end of the dry season. Rains last from December to April, May and June are still well supplied with soil moisture. July, August, September and October are dry, the ground becomes dry and barren. There is no feed for cattle and cattle are not kept on account of the Tsetze fly. This is consequently a drought country, wet half of the time and dry half of the time. It is tropical. The soil is leached, a uniform red clay, reminding one somewhat of our south. Relatively poor in nutritive material but not difficult to farm. It is fertilized with bone meal. The soil samples will show the character of the soil. Photos taken by M. de Neuter of some of the experiment plants bring out a number of points. Fertilizers which lack phosphorus do not give good results. Potash is not as essential. Best results seem to be