December 25, 1919. Worked on records most of the day. M. De Neuter, the the Chef de l'Agriculture of Elizabethville, called in response to a letter from me in the afternoon and arranged to take Raven and me to the experiment station on the following day.

December 26, 1919. A very heavy rain in the morning. M. De Neuter called in the afternoon and drove us 16 kilometers to the experimental farm at Munama. The road leads out through dry forests, tree tops coming almost together above the road in places. The land is covered with grass and there is almost no underbrush. Trees have a spreading crown and are rather flattopped. The grass cover is unusually good. It begins to grow in December and is dried up and gone in June and July. Excellent grazing from December to June and July, then there is practically nothing and the stock has to subsist during this period on stored forage. There is little or no stock here. The tsetse fly has prevented the importation of animals with the exception of a few mules and donkeys. Native cattle and occasionally a horse can be kept in the city of Elizabethville or on well-cleared farms. The natives in this section keep no cattle.



F²-3. Shows a row of Agave americana, S.P.I. 49836, at the experiment station. Some of the station buildings and De Neuter.



F²-4. A field of alfalfa, planted for trial. In the foreground it is 1 month old. Further back planted one year ago, January, and cut in June. It was irrigated three times. Failed to find any tubercles on the roots, but could not make a thorough search as I had no shovel.



F²-5. A field of sweet potatoes. These are a staple crop here. Are dug and used as needed. The natives plant sweet potatoes, peanuts and cassava in the same hill. Everything is hilled, corn as well as Irish potatoes. This photograph shows a number of anthills in the background which have been lowered and in some places planted to crops. Also a few of the farm animals in the distance. Two donkeys and a team.

(next page)

F²-7. Irrigation ditch. cassave above the ditch. Cynodon growing luxuriantly along the edge of the ditch. The director and Mr. Raven in the background.

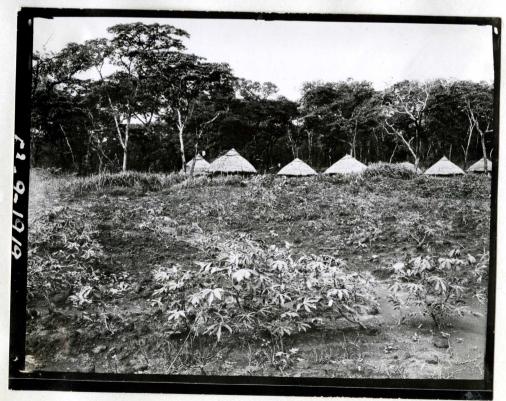




F²-6. Munama station, corn field of Iowa Silver Mine. Note ant hills in the background.



F²-8. A plantation of potatoes with Iowa Silvermine in the background. Corn is planted over the top of the anthill in the middle background, while behind this are two larger hills covered with trees. Open forest type in the background.



F2-9. A plantation of cassava, <u>Manihot esculenta</u>, S.P.I. 49839, grown by the natives in the foreground. In the back forests of Brachystegia, and native huts.

Cassava is one of the chief plants cultivated at Elizabethville. This is regarded as about the limit of successful cultivation of cassave, since the climate here is relatively cool. The leaves seem to show a little of a mosaic disease. It is usually planted with sweet potatoes and manioc in the same hill. One of the principal enemies of the cassave is the procupine, which digs out the plants. This type should be tried out to determine whether or not it will grow further north than other strains.

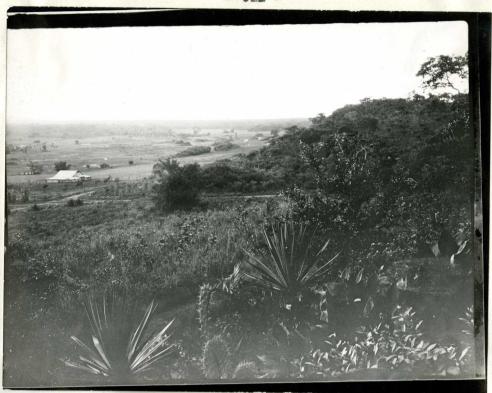


F²-10. A planting of sisal, Agave sisalana, S. P. 49837. Leaves about 5 feet long. Reproduction is by plantlets in the flower stalk. These resemble bulblets.



F²-11. A general view of the plantings. Shows the Dodge car used by Director M. De Neuter, also H. Rommelarre, farm superintendent, Oscar Dupont, and H. C. Raven.

F2-12. A general view across the government garden. Dry forest in the back. A large ant hill at the right.



G2-1. A general view over the experiment station of Munama.



 G^2 -2. Residence farm superintended and Mrs. Rommelarfe, also Mr. De Neuter and Mr. Raven.

At the station I noted the following plants:

Tecoma, beautiful yellow shrub used extensively as decorative plant.

<u>Duranta</u>, beautiful blue flower with yellow fruits. Abundant at this station and in the city parks.

Phytolacca, one of the chief street trees. It is destroyed by termites.

Asparagus, a bed at the station, doing very well. So far as I know the wild asparagus is never used for food.

Mulberry, Cape variety, and the oleander, are prominent shrubs. Also poinsettia and datura, especially the double-flowered datura.

Cynodon dactylon has been planted and has become absolutely dominant.

Paspalum is a somewhat better grass.

Iowa Silvermoon is the chief type of corn grown.

The Brazilian Cyphomandra betacea grows very well and is one of the prominent solanaceous plants on the station garden.

There occur here also the Musuku, which is probably the same as Masuko or Mahobohobo. Masuko seems to be a Swahili name.

Punda, a native fruit with very large stone.

We were strongly advised to secure passage on the Louis Cousin from Bukama to Congola.

I have written the Department to send M. De Neuter the following plants:

Wheat. Any Varieties which will do well in the Southeast.

Oats. Burt, and red-rust proof, and varieties which do well in South and East.

Corn From both the South and from the corn belt.

Sorghum Especially the dwarf varieties.

M. de Neuter has promised to secure seeds of all the native grasses.

These he will not identify, but will send in samples (or stems?) of the plant with the seed.