GLIMPSE OF THE EAKMAT CENTER (BANMETHUOT)

Total area: 250 hectares (potential)
Cleared and plowed areas: 190 hectares

I. New orientation for the Eakmat agricultural experiment center:
   a. Introduction of plant varieties imported from abroad.
      Study of their behaviour. Comparison with local varieties.
      - Improvement of traditional agricultural methods: studies on soil
        preparation, maintenance, struggle against parasites, harvest and storage.
      - Adoption of new cultural methods; tests on rotation of crops, green
        manure, complementary use of chemical and organic fertilizers.
   b. Multiplication of improved varieties for distribution to agricultural
      development centers.
   c. To become a center for diffusion of agricultural methods for farmers
      (temporary training courses during the slack-season). In this respect
      the school of Dat-Iy (Bounkroa) which has already been operating for one
      year, was moved to Eakmat because of more favorable conditions here for
      practical teaching in agriculture.
      Center of after-school training for graduates from schools of agri-
      culture (for instance students of Blao Agricultural School), which serves
      as a place of practical probation for them.

II. Present situation:

The station's program for this year, which is actually the first
year, is the following:
   a. Tests of new varieties:
      1. Vegetables
         - Various beans -- e.g. Poona pea, green pea, black eyed pea, etc....
         - Various egg plants: Rosita, Black Beauty.
         - Various peppers: Hungarian wax, California Wonder, Long Red Cheyenne,
           Ricot Wonder, Cali Wonder, etc......
Various melons.
Various tomatoes: Homestead, Manalucie, etc.....
Various salads: Lettuces, Paris Island Cos, Parsley Moss Curled, etc.....

Reasons that these tests are needed: This type of farming requires diligent labor. It is suitable for small colonization of the agricultural development centres in the Highlands. The trials aim at:

- providing new possibilities for farming by introducing vegetables and other crops thus far unknown or totally imported.
- bringing in and adjusting out-of-season cultures by such methods as cultivation in forcing frames or under plastic roofs so that the peasants may benefit more from their crops.
- perfecting the methods of cutting, fumage, maintenance, etc... to get the highest output, etc....

2. On food cultures:

- Sweet potatoes:  - Japanese 100
  - Japanese Red Stem
  - Japanese 101
  - Taiwan 54
  - 55
  - 57
  - OK
  - Red Gold
  - Vietnamese Yellow Variety, etc...

Justification of the test: The local potatoes give poor yield in tuber. So it has been decided to introduce these varieties for comparison, and to select those which will be superior to the ones cultivated in the country.

- The Sorghos: Martin Milo Sorghum
  Spreading variety
  Closed variety
Justification: The sorghos can stand dryness and therefore would be very interesting as snatch crop before the dry season.

Rice in dry cultivation:
- The clausung trial of local varieties gives:
  The Viet Ndjul
  Bla Kehon
  Dio Bier (sticking rice)
  Dio Wik (sticking rice)
- Tests of quick-growing varieties of rice:
  Tunsart
  Nang Quot
  Samo

Justification: The rice traditionally cultivated on the Highlands generally requires too long a period to yield (7 to 8 months). Only the introduction of quick-growing varieties of 3 months would permit two crops per year instead of one.

- Other food crops:
  For example: Peanut
  Manioc, etc...

3. Industrial crops:
- Ramie: Comparison of
  - The Japanese varieties:
    Murakami
    Tatsutayama
    Miyazaki II A
  - The American varieties from Florida
    PI. 87521
    R. 137
  - The Malayan varieties
    Clone 38
Clone 19
1002
108
99
24

- The Philippine varieties:
Clone 1001
London
Chuma
Guiran Taipan
Saikaiseishin (Japanese variety imported in Philippines)
Saikeshinshu (Japanese variety imported in Philippines)

- The Formosan varieties:
Aho
Tainan White skin
Tishan No. 3
Teh Hsien Tji

Justification: The local variety of ramie in Phu-Yen is robust and of good yield, but improved quality of the fiber as well as greater length is to be hoped for. The study of these foreign varieties is proposed for a comparison (and an improvement) of the qualities in yield, length, and quality of the fiber.

- Kenaf: Tests on varieties of:
El Salvador
BG 52 - 1
BG 52 - 11

Justification: These varieties are reputed to be high producers and should be studied with a view to their future propagation to replace the Pokeo varieties presently cultivated, and those imported from Thailand as well.

- Tobacco: Tests on:
Sumatra (from Cameroons)
Paraguay (from Dalat)
Brazil (from Dalat)
Paraguay (from Corsica)
Brazil (from Corsica)
Rio Grande (from Dahomey)
Maryland (from Cameroons)

Justification: These varieties are those utilized in the composition of cigarettes of the Mitac firm (one of the four manufacturers of tobacco in Vietnam). Seeds are furnished by this company and operations are directed in concert with the technicians of this firm with a view to improving the output and the quality of local tobacco.

b. Creation of nurseries for grafting woods and for multiplication of seeds.

1. Rubber plant (caoutchouc)

2. Orchard cultures:

Tests on citrus:

Oranges: Sanguine

Washington Navel
D4
N.A2
C.1173
Portugal Sanguine

Pine Apple
Xa-Doai
C.1178
C.1177
Valencia late
C.1174
Lan-Xang
Mandarins: C.1164
Clementine ordinaire
Clementine Montreal
d’Auger
de Huong-Can

Lemons: of Hue
of Eureka

Mangos: Xoai Cat den, trang
Phoi
Battambang
Sundhersan
Chambaddem
Edward Mango
Zill Mango

Guava tree: Port Hely

etc...

Justification: The Highlands are ecologically a region for fruit-tree cultivation. But the local varieties yield little producing, unattractive fruit of acid juice and with many seeds. Hence these tests have been made with a view to selecting the variety best adapted to local conditions.

- Nursery for rubber-tree grafting of PR 107
  LCB 1320

Justification: The clonus PR 107

LCB 1320 are the highly productive clonus furnished by the Institute of Rubber tree Research of Lai-Khe. This nursery is designed to furnish two years enough grafts for field-grafting from 2,000 to 5,000 hectares of rubber trees as provided in the program of rubber planting in agricultural development centers.

- Nursery for fruit tree grafting - Citrus
  - Mangos, etc.
used for the grafting of various seedlings of other substation nurseries in the Highland provinces.

- **Nursery for multiplication:**
  - of coffee shrubs: Robusta
    - Chari
    - Arabica resisting Hemileia

**Justification:** Each year in the agricultural development centers, the need for coffee-plants exceeds 1,000,000 stumps and is increasing every year. Hence, the need for this nursery for supplying them with good material.

**Tests:**
- methods of advanced nurserymen on coffee have been tested, for example:
  - early planting out at nail stage and butterfly stage.
- early plantation: at the 8-month plantlet stage, of 6 pairs of families to eliminate the overly expensive stay of two years in the nursery.
- tea plant:
  - Shan - Paka

The Shan is the one that gives the most appreciated tea in Vietnam.

- Kenaf: of Poekeo, Thailand
  - of El Salvador (Cuba)

**c. Fertilization tests:**
- Ramie:
  - blocks method - to determine the best fertilizer formula for ramie (NPK)
- Kenaf:
  - Land loaned to an American firm for test.

**d. Tests of fodder:**

Introduction of fodder varieties

- Sweet Sudan
- Rhoades Sudan
- Sudan grass, etc....