CARIBBEAN FOOD CROPS SOCIETY

PROCEEDINGS

ELEVENTH ANNUAL MEETING

POSSIBILITIES OF ONION BULB AND SEED PRODUCTION IN THE FRENCH CARIBBEAN

(Guadeloupe – Martinique)

by
G. ANAIS

Station d'Amelioration des Plantes
Centre de Recherches Agronomiques des Antilles et de la Guyane
Institute National de la Recherche Agronomique (France)
97–1 PETIT–BOURG (GUADELOUPE)

Onion is a very interesting crop for production in the Caribbean, because the consumption of this product is very high.

It is the second largest of our vegetable imports after Irish Potato (The imports in 1971 were 4,500 tons of Potato and 1,256 tons of Onion).

Moreover this crop can be grown without irrigation when planted from October to December.

The best situations for this crop are the dry areas with alkaline soils: Barbados, Antigua, Grande-Terre and Marie-Galante in Guadeloupe, and some locations in the south of Martinique.

A. — Bulb Production:

Three possibilities for bulb production were tried, namely:–

Direct seeding
Transplanting
Planting of sets.

1. Direct seeding:

This is the most economical method but requires some technique in soil preparation, the need of special equipment, and the use of herbicides. It however permits the total mechanization of the crop.

2. Transplanting:

The seeds are transplanted about 40 days after sowing seeds. This method demands much hand labour, but the soil preparation can be less careful than for direct seeding. It is suitable to small family farms on which chives and leek are grown and where hand labour is traditionally used.

3. Planting of onion sets:

The sets used were produced at the end of the previous dry season (Seeding January 18th set April 12th 1972) Seeding March 3rd sets April 21st) 1972. The onion sets were then planted on January the 16th 1973 and the bulbs harvested on April 6th 1973.

For the local growers it is the method which seems to be the most suited.

It requires less specialized soil preparation and planting can still be mechanized.

B. -- Seed Production:

In view of testing the possibility of breeding onion varieties for the Caribbean area, onion seed production was tried in Guadeloupe. Bulbs of several varieties were planted on October, 11th 1972.

Varieties from Niger, kindly received from M. NABOS of the IRAT Agency, flowered and seeded in good conditions.

The seeds obtained were of very good quality, showing that onion production and variety breeding is possible in our conditions.

SUMMARY

In our experiments three possibilities were used for onion bulb production: Direct seedling, Transplanting, Planting of sets. The direct seeding is more economical but requires special equipment. Transplanting s labour consuming. Planting of sets requires less specialized soil preparation than direct seeding but can also be mechanized.

Seeds can be obtained by planting bulbs of the previous year.