

## SERIES 12

## SHIKOKU NATIONAL AGRICULTURAL EXPERIMENT STATION

**Established :** 1964

**Location :** Senyo-cho, Zentsuji City, Kagawa Prefecture

**Director :** YASOZI TSUBOI

**Total Number of Employees :** 140 (Research personnel: 66)

**Outline of Work :**

Shikoku is the southeast island of Japan with a warm climate and produces many kinds of crops. Because a greater part of the island is hilly or mountainous, the cultivated area in the district is relatively small, occupying only 13.5% of the total area, and consequently a very intensive type of farming is prevalent. In the paddy field, double cropping is commonly practised of rice and wheat or barley. Besides these grain crops, the plain land is used for growing vegetables and flowers, and dairy farming. Citrus fruits are also a major product in the district especially at coastal hillside.

In this research station, therefore, the following studies and experiments on the subjects are undertaken:

- (1) Intensive farming in the plain field,
- (2) breeding of (naked) barley,
- (3) soil conservation,
- (4) improvement of slope land farming,
- (5) integrated control of insect pests and diseases.

**Recent Principal Research Findings :**

Direct-sowing method of rice plant in a short growing period.

Breeding of new varieties of naked barley; "Nampu-hadaka", suitable for mechanized cultivation and "Yunagi-hadaka", of high quality and high yield. Mechanism of organic acid synthesis and accumulation in Satsuma orange (by isotope method).

Introduction of summer forage grass species into the warm regions (Rhodes grass and colored Guinea grass).

Simplified reclamation method (cutting-burning-sowing) of hillside for grassland. Ecology and control methods of such serious pests to crops in this region as leaf and plant hoppers.

Improved control method of soil erosion on hillside field and orchard.

Effective method in opening and maintaining of hillside citrus orchard.

**Publications :**

*Bulletin of the Shikoku Agricultural Experiment Station.* (In Japanese with English summary, semi-annual, free exchange)

*Technical Advances in Shikoku Agriculture.* (In Japanese, annual, free exchange)

**Organization and Main Research Themes :**

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| Director— | —Research Planning and Coordination Division (3 sections)  |
|           | —General Administration Division (2 sections)  |
|           | —Agronomy Division (8 laboratories and 1 section)—Intensive utilization of paddy fields; Breeding of barley. |
|           | —Land Utilization Division (6 laboratories and 1 section)—Utilization of slope land in warm areas.           |