

**SERIES 4****HORTICULTURAL RESEARCH STATION**

**Established :** 1902

**Location :** Hiratsuka City, Kanagawa Prefecture

**Director :** Kōichi Satō

**Total Number of Employees :** 270 (Research personnel: 146)

**Outline of Work :**

This station performs research and experiment to improve the productivity and quality of horticultural crops. Its work covers, for instance, the breeding and improvement of vegetable and fruit varieties, and the physiology and cultivation method of flowers, keeping a close relation with prefectural agricultural experiment stations and horticultural stations all over the country.

**Recent Principal Research Findings :**

*Fruit trees:*

Breeding of new varieties of peaches for canning, Japanese pears, chestnuts, apples, and citrus.

Method of leaf-analysis of fruit trees.

Soil management of orchards.

Use of growth regulators in relation to fruit production.

Mechanization of harvesting of citrus, apples, chestnuts, etc.

Frost protection of fruit trees. (Mechanism and control)

Suitability for canning of citrus, peaches, pears and other fruits.

Freezing preservation of fruits and vegetables.

*Vegetables and flowers:*

Breeding of resistant varieties of Chinese cabbages to diseases.

Breeding of interspecific hybrids between cabbage and Chinese cabbage varieties through the application of embryo culture techniques.

Breeding of new varieties of tomatoes, strawberries and cucumbers.

Application of phosphorus fertilizers to vegetables and their absorption.

Deterioration of soil productivity in vegetable fields and their prevention.

Gravel culture of vegetables.

Method of forcing freesia.

Physiological specialization of tomato late blight and leaf mold fungus.

Use of growth regulators in relation to vegetable production.

**Publications :**

*Bulletin of the Horticultural Research Station.* (In series: A, B, C, D; in Japanese with English summary, annual, free exchange.)

**Organization and Main Research Themes:**

- Director—
- Research Planning and Coordination Division (4 sections).
  - General Affairs Division (2 sections).
  - Pomology Division (4 laboratories)—Breeding technique Improvement of varieties. Physiology of fruit trees. Processing of fruits and vegetables.
  - Vegetable Division (5 laboratories)—Breeding technique. Breeding of varieties resistant to diseases or insects. Seed production method of vegetables. Physiology and cultivation method of vegetables and flowers.
  - Environment Division (4 laboratories)—Improvement of soil and fertilizer application, meteorology for fruit production. Pathology and entomology of horticultural crops.
  - Morioka Branch (7 laboratories) (Morioka City, Iwate Prefecture)—Improvement of the varieties, physiology, cultivation method, and disease and insect control of fruit trees in cold areas. Improvement of the varieties and cultivation method of vegetables in cold areas.
  - Okitsu Branch (7 laboratories and 1 section) (Shimizu City, Shizuoka Prefecture)—Improvement of the varieties, cultivation method, disease and insect control, and processing of fruit in mild climates. Improvement of the varieties and cultivation method of vegetable crops in mild climates.
  - Akitsu Branch (2 laboratories) (Akitsu machi, Hiroshima Prefecture)—Improvement of varieties of deciduous and citrus fruit trees in warm and dry climate areas.
  - Kurume Branch (6 laboratories and 2 sections) (Kurume City, Fukuoka Prefecture)—Cultivation method. Improvement of varieties and insect control of fruit trees in warm areas. Improvement of varieties and cultivation method of vegetables and flowers in warm areas.

**Errata**

No.	Page	Line	Wrong	Correct
Vol. 4, No. 3	22	Fig. 6 ↑ 11 (center)	homozygote	heterozygote
Vol. 4, No. 4	7	↑ 2	for each and night exist	erasure
	7	Table 2	range	Range
	8	Table 3	yearly by difference in	yearly difference in
	32	↓ 3	Identfication	Identification
	33	Table 2	Linnée	Linné
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	"	↑ 1		
	36	↑ 18	Control	<b>Control</b>
"	↓ "	<i>trannus</i>	<i>tyrannus</i>	
"	References	omission	8) Nomura, K. and Oyama S.: Studies on orchard illumination against fruit-piercing moths. I. <i>Jap. Jour. Appl. Ent. Zool.</i> 9 (3), 179-186 (1965).	