

**SERIES 7****HOKKAIDO NATIONAL AGRICULTURAL EXPERIMENT  
STATION****Established:** 1901**Location:** Hitsujigaoka, Sapporo City, Hokkaido**Director:** Mutsuo Kukita**Total Number of Employees:** 442 (Research personnel: 209)**Outline of Work**

Hokkaido, the northernmost island of Japan, has a climate similar to that of southern Canada, the northern part of U.S.A. and northern European countries. Its soil condition is poor as approximately 85% of the cultivated land consist of peat, volcanic ash, heavy clay or acid soil. Of the total arable (3.3 million ha.) only about 0.9 million ha. or less than 30% have been developed heretofore, which is often subject to cold damage and loss of soil fertility. This is mainly caused by simple transplantation of the traditional farming system employed in the mainland of Japan to this district, where physical conditions are utterly different. Under these circumstances, researches conducted at this station have been focussed on the following projects: Improvement of crop cultivation to stabilize the yearly change in crop yield in cool temperature region; improvement of low productive soil (volcanic ash, peat and heavy clay soils) and promotion of dairy farming by development and improvement of grassland.

**Recent Principal Research Findings**

Breeding rice, field and forage crops.

Research on the mechanism of cold weather injury of rice and upland crops and its control.

Nutritional physiology and growing technique of crops.

Ecological studies on the disease, insects and nematodes injuries.

Researches on the mechanism of disease resistance of crops.

Improvement of low productivity soil.

Irrigation of paddy and upland crops.

Technique for development and maintenance of grassland.

Efficient utilization of grass and grassland.

Improvement of dairy farming technique.

Efficient utilization of agricultural machines in rice and upland crop cultivation.

**Publications***Hokkaido National Agricultural Experiment Station Report.* (In English or in Japanese with English summary, 2-3 issues a year, free exchange.)*Research Bulletin of the Hokkaido National Agricultural Experiment Station.* (In Japanese with English summary, 2-3 issues a year, free exchange.)*Soil Survey Report of the Hokkaido National Agricultural Experiment Station.* (In Japanese, annual or semi-annual, free exchange.)*Annual Report of Hokkaido National Agricultural Experiment Station* (In Japanese, annual, free exchange.)

**Organization and Main Research Themes**

- Director—  
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Deputy  
Director
- Research Planning and Coordination Division (3 sections).
  - General Affairs Division (2 sections and 2 branches).
  - First Crop Division (8 laboratories)—Breeding and growing technique of rice and field crops in cold region. Control of cold weather injury of rice and upland crops.
  - Second Crop Division (4 laboratories)—Breeding and growing technique of horticultural and industrial crops in cold region.
  - Upland Farming Division (8 laboratories and 1 section) Memuro-cho, Kasai-gun)—Physical and chemical properties of volcanic ash soil and its improvement; Establishment of appropriate cropping and cropping rotation in cold temperature region; Establishment of mechanized growing technique; Research on the ecology and control methods of nematode injuries of crops.
  - Agricultural Chemistry Division (5 laboratories)—Soil survey and soil classification of arable land in Hokkaido; Soil fertility and fertilizing of paddy and upland fields; Characteristics of soils particular in Hokkaido and measures for increasing the productivity of such soils; Physical and chemical properties of peat paddy soil and improvement of growing technique of rice in said soil.
  - Agricultural Physics Division (4 laboratories)—Control of injuries of crops caused by cold weather; Improvement of low productivity soil and water irrigation; Efficient utilization of agricultural machines in cultivation of rice and forage.
  - Plant Disease and Insect Division (4 laboratories)—Diseases of main crops; Insect injury of main crops.
  - Livestock Division (3 laboratories and 1 section)—Feeding and improvement of indigenous stock.
  - Grassland Development Division (8 laboratories)—Development management and utilization of grassland; breeding and disease control of forage crops.
  - Farm Management Division (2 laboratories and 1 section)—Farm management in cold areas.