

OKINAWA PREFECTURAL LIVESTOCK AND GRASSLAND RESEARCH CENTER



OKINAWA PREFECTURE

Livestock Research Center: Research Policy and Direction of Promotion of Research

Basic Issues

Strengthening of functions as the “ Center of Development of Subtropical Livestock Technology That Takes Advantage of Okinawa’s Natural Environment ”

Basic Policies

- 1 Promotion of research and development that responds to the needs of the production field
- 2 Promotion of pioneering research and development in anticipation of future issues
- 3 Strengthening of industry-government-academia collaboration and enhancement of research system that promote comprehensive/advanced research and development
- 4 Improvement of a mechanism for spreading research results in coordination with relevant institutions

Direction of promotion

- 1 Development of production technology suited to subtropical regions
- 2 Promotion of breeding and improvement of livestock/tropical grass that take advantage of Okinawa Prefecture’s characteristics
- 3 Development of sustainable livestock technology that is in harmony with the environment
- 4 Promotion of operations in coordination with the government

Planning and General Affairs Section

- 1 Matters related to the management of the Livestock Research Center
- 2 Matters related to planning and coordination of experiment and research
- 3 Matters related to maintenance of the research system
- 4 Matters related to budget adjustment and accounting
- 5 Matters related to miscellaneous accounting
- 6 Matters related to personnel administration

Special Research Group

- 1 Matters related to developing basic research policies and project planning, and progress management
- 2 Matters related to surveys on special research projects and their implementation
- 3 Matters related to coordination and exchanges with other experiment and research institutions
- 4 Matters related to experiment and research assessment systems
- 5 Matters related to utilization of and publicity on research results

Breeding and Genetics Section

- 1 Matters related to developing stud bulls
- 2 Matters related to production and issuance of frozen sperms of stud bulls
- 3 Matters related to transplanting of fertilized ova of Wagyu cattle
- 4 Matters related to establishment of clone cattle production technology
- 5 Matters related to preservation and utilization of frozen pig sperms
- 6 Matters related to technology to improve the reproductive capacity of pigs
- 7 Matters related to breeding of pigs and DNA analysis technology
- 8 Matters related to enhancing the meat quality of pigs
- 9 Matters related to growing new varieties of tropical grass
- 10 Matters related to collection and introduction of genetic resources of tropical grass and their assessment
- 11 Matters related to genetic analysis of tropical grass using molecular markers



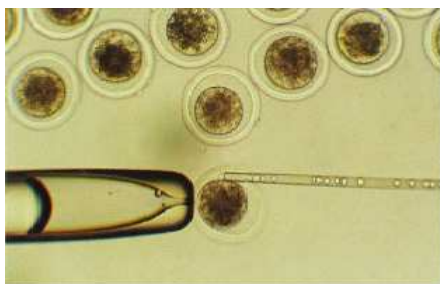
The stud bull Kitafukunami



An evaluation of meat and marbling quality by progeny test of Kitafukunami



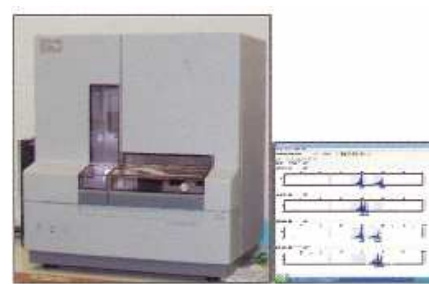
Collection of fertilized ova



Manipulation for nucleus transfer



Experiments on increasing the reproductive capacity of the Agu, a native Ryukyuan species of pigs



Multilateral analysis of the native Ryukyuan pig Agu using DNA sequencers



Growing new varieties of guinea grass



Bagging for cross-pollination of guinea grass



Assessment of genetic resources of guinea grass

Feeding and Environment Section

- 1 Matters related to livestock (beef cattle, dairy cattle, pigs) feeding system technology
- 2 Matters related to large livestock (beef cattle, dairy cattle) breeding and rearing technology
- 3 Matters related to improvement of livestock feeding and technology concerning livestock fattening and milk production
- 4 Matters related to livestock industry environmental preservation technology
- 5 Matters related to cultivation, preparation, and storage of feed crop
- 6 Matters related to technology concerning establishment, improvement, and management of pastures
- 7 Matters related to assessment of nutritional value of feedstuff
- 8 Matters related to turning unused resources into feedstuff
- 9 Matters related to analysis of self-supplied feedstuff and screening of commercial feedstuff
- 10 Matters related to dissemination of seed and seedlings
- 11 Matters related to training and guidance regarding livestock technology



Giant start grass



Pangola grass (Transvala)



Oxidation ditch-type batch activated sludge treatment tank



Self-cleaning type sawdust-based pig farming



Establishment of high quality milk production technology



Establishment of fattening technology for creating Okinawan brand of Wagyu cattle



Testing for selection of pasture grass suitable for Okinawa Prefecture



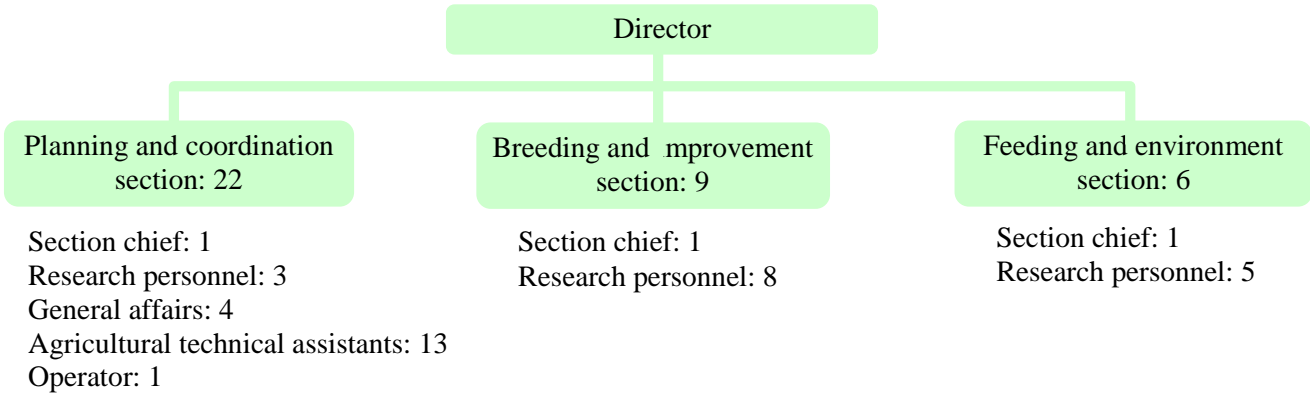
Analysis of mineral content by atomic absorption method



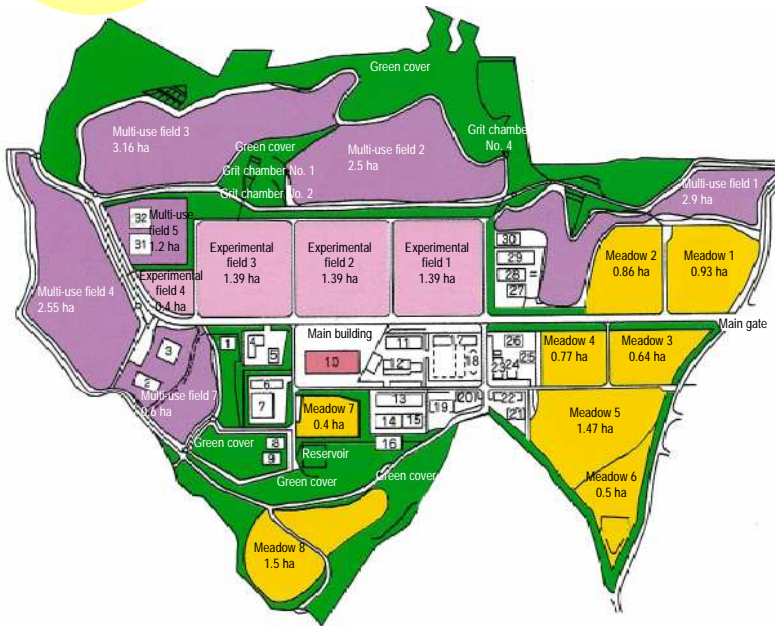
Development of silage preparation technique

Organization

Number of staff members: 38
 Composition
 Research personnel: 20 Administrative staff: 4
 Agricultural technical assistants: 13 Operator: 1



Layout of the facilities



1	Breeding and improvement cattle shed	17	Dairy cattle shed
2	Evacuation cattle shelter	18	Steel silo
3	Clone testing cattle shed	19	Shed for stock boars
4	Storage-cum-investigation room	20	Isolation shed for pigs
5	Greenhouse	21	Cattle shed for stud bull candidates
6	Feed storehouse	22	Cattle shed for breeding and fattening
7	Agricultural machinery storehouse	23	Animal manure drying shed
8	Biotechnology laboratory	24	Drying facility
9	Pasture grass breeding laboratory	25	Compost shed
10	Main building	26	Cattle shed for testing high quality breeds
11	Cattle shed for progeny test	27	Meat quality examination room
12	Shed for stud bulls	28	Shed for fattening pigs
13	Shed for brood sows	29	Shed for certified pigs
14	Pig farrowing shed	30	Shed for managing pastured cattle
15	Shed for raising pigs	31	High quality compost processing facility
16	Environmental conservation-type pig shed	32	Soil moisture control facility

Land area and livestock inventory

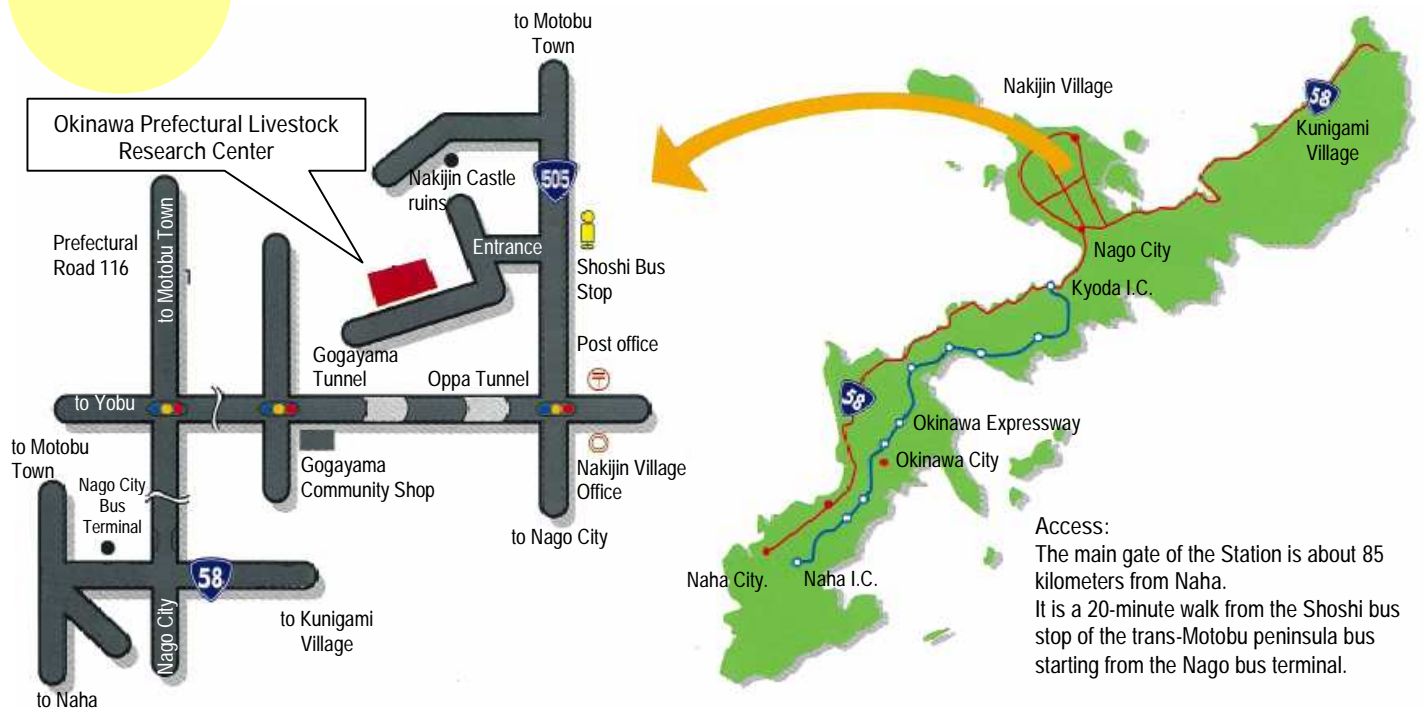
Land use	Building site	Experimental fields	Meadows	Multi-use fields	Roads and green cover	Total
Area (ha)	5.98	4.56	7.07	12.31	14.73	44.65

Bulls	Beef cattle	Dairy cattle	Pigs
18	174	22	323

History

1894	Experiments on livestock started at the Agricultural Experiment Station (earlier known as the Agricultural Breeding Station) at Tonoshiro, Yaeyama.
April 1921	The station became an independent prefectural breeding station. Servicing of different livestock and multiplication, rearing and distribution of breeding stock started, while concurrently carrying out surveys and research on livestock farming.
August 1945	World War II ended. The entire station was destroyed in the war.
May 1972	The Ryukyu Livestock Experiment Station was renamed as the Okinawa Prefectural Livestock Experiment Station with the reversion of Okinawa to Japanese administration.
March 1976	New land for relocating the Experiment Station and for staff housing procured at Nakijin Village.
April 1983	The whole station moved to the new premises and experimental research started there.
April 1989	The Laboratory of Biotechnology was established in accordance with a partial amendment of the Rules for Administrative Organization of Okinawa Prefecture.
April 1997	The Laboratory of Tropical Grass Breeding was established in accordance with a partial amendment of the Rules for Administrative Organization of Okinawa Prefecture.
April 2005	Transferred from the Agriculture, Forestry, and Fisheries Department to the Planning Department in accordance with a partial amendment of the Rules for Administrative Organization of Okinawa Prefecture.
April 2006	Name changed from the Livestock Experiment Station to the Livestock Research Center in accordance with a partial amendment of the Rules for Administrative Organization of Okinawa Prefecture. The organizational structure also changed from a 1-division, 5-office system to a 3-section system consisting of the Planning and Coordination Section, the Breeding and Improvement Section, and the Feeding and Environment Section.

Location



Okinawa Prefectural Livestock Research Center

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