

3.2 Research Projects

All Divisions

Basic Studies on the establishment of plant production system using sea water in the coastal arid land funded by COE program

Subdivision of Natural Environment

Studies on the relationship between net primary plant productivity and land usage in arid regions of China

Allocation from the University Funds

Design of the atmospheric vapor distillator in arid regions

Monbusho Grant-in-Aid for Scientific Research A(1)

Analysis of ground surface information by remote sensing in arid land

Allocation from the University Funds

Studies on the wind climate and the sand movement in the Tottori Sand Dune

Allocation from the University Funds

Observation of acid rain

Allocation from the University Funds

Studies on the effect of water retentivity and thermal variation under soil surface mulching

Allocation from the University Funds

Studies on the agricultural water management to promote sustainable agriculture in arid lands

Monbusho Grant-in-Aid for Scientific Research A(1)

Subdivision of Water Resources

Movement of salt and water due to water uptake by plant roots

Allocation from the University Funds

Design and water management of micro irrigation

Allocation from the University Funds

Estimation of crop consumptive use of water

Allocation from the University Funds

Establishment of soil moisture measurement methods

Allocation from the University Funds

Development of technology for rehabilitation of salt accumulated soils in the Central Asia

Grant-in-Aid from Environment Agency

Soil and water properties for effective water management

Allocation from the University Funds

Prevention of soil erosion in surface irrigation method

Allocation from the University Funds

Subdivision of Plant Ecophysiology

Development of non-destructive measuring systems for root growth based on AE method

Monbusho Grant-in-Aid for Scientific Research A

Development of plant production system using sea water

Monbusho Grant-in-Aid for Scientific Research B

Improvement of plant sensitivity to salinity

Monbusho Grant-in-Aid for Creative Basic Research

Effect of root zone temperature on root growth

Allocation from the University Funds

Physiological mechanism of wheat on deep-sowing tolerance

Allocation from the University Funds

Improvement of fertilizer application under salinity condition

Allocation from the University Funds

Search for germination stimulant of parasitic weed *Striga*

Allocation from the University Funds

Isoquinoline biosynthesis in *Menispermum* root cultures

Allocation from the University Funds

Subdivision of Plant Production

Studies on vegetable cultivation on sandy soil

Monbusho Grand-in Aid for Scientific Research **B(2)**

Studies on development of administration technology for fruit and tree by injector to put insecticide

Research of Requisition

Effect of microorganism culture solution on growth of *Phalaenopsis*

Research of Requisition

Studies on the way of irrigation for cultivation of Baker`s Garlic in sand dune

Research of Requisition

Studies on crop tolerance to water deficiency and salinity

Allocation from the University Funds

Studies on practical aspects of melon cultivation on a sandponics bed system

Allocation from the University Funds

Subdivision of Revegetation and Grassland Development

Dynamics of Pine trees on sand dunes

Allocation from the University Funds

Tree growth, and nutrient and water dynamics of trees and in the soil

Allocation from the University Funds

Growth and reproductive characteristics of woody plants

Allocation from the University Funds

Ecological studies on sand dune vegetation

Allocation from the University Funds

Maintenance mechanisms of plant communities in arid areas

Allocation from the University Funds

Land use and regeneration mechanisms of woody plants in semi-arid areas of east China

Nippon Life Insurance Foundation

Subdivision of Land Conservation

Sustainable development of irrigated agriculture in arid land

Monbusho Grant-in-Aid for International Scientific Research Program of Field Research

Research Projects

Development of efficient irrigation schedules and soil salinity monitoring system in productive green land

Monbusho Grant-in-Aid for Scientific Research **A(2)**

Development of soil moisture management for cultivation and its practical use

Monbusho Grant-in-Aid for Scientific Research **C**

Studies on water quality of irrigation water resources in the Tohaku irrigation project

Ministry of Agriculture, Forestry and Fisheries

Soil salinity improvement using artificial zeolite

Research of Requisition

Two dimensional capillary supply under drip irrigation

Allocation from the University Funds

Simultaneous movement of salt and water in unsaturated sand

Allocation from the University Funds

Non-destructive measurement of moisture and salt in unsaturated soil

Allocation from the University Funds

Inverse solution of unsaturated soil hydraulic functions from transient outflow and soil water pressure data

Allocation from the University Funds