

UNIVERSITY OF CALIFORNIA
COLLEGE OF AGRICULTURE
AGRICULTURAL EXPERIMENT STATION

PROJECT No. 1686
REPORTED BY A. B. Carlton
Davis, Soils and P. H.
Campus and Division or Department
DATE January 16, 1958

Annual Summary Statement of Progress for year ending Dec. 31, 1958
This Summary is in addition to, not in place of, more complete reports of progress prepared periodically and at least once a year with a deadline of Feb. 1.

Title: **Peat Land Conservation and Peat Dust Abatement**

Personnel: **Alan B. Carlton and cooperating research and extension staff**

Principal results of year: **Dust storms were monitored and compared with distribution of storms in the three previous years. Despite an exceptionally wet spring culminating in serious April floods and a wetter than normal May, distributions of dust storms were remarkably similar. As in previous years, a large majority of the bad storms in 1958 occurred between May 15 and June 30 and well over half the total number of storms occurred in this period. These observations point out the importance of wind erosion control methods geared to this critical period of six weeks.**

Inter-row planting, the most promising and most highly developed erosion control method, was seriously hampered by the late rains, excessively wet soils, and stubborn weed growth. As a result, only a limited amount of inter-row planting was undertaken by cooperators. Several important factors in successful inter-row management were brought into focus. The lateness of the inter-row plantings this year resulting from the abnormally wet spring made it impossible to adequately evaluate inter-row planting by means of dust collectors or other erosion measuring devices. Observations, however, pointed to the high degree of wind erosion control and consequent dust afforded by adequate inter-row plantings.

A variety-time of planting trial to test the suitability of 25 varieties of grains and other plants for inter-row planting was carried out. Eleven varieties were found promising enough for further testing, seven of which were ready for testing in the field.

A grain drill specifically designed for inter-row planting was being developed. It would eliminate several factors presently causing difficulty in successful inter-row management.

Bamboo windbreak material increased in height only slightly but a large number of new shoots greatly improved the stand density. A study of rhizome cutting was begun to find a way of controlling the spread of the bamboo.

Subsidence measurements on three islands, a continuation of a long-term study, indicated an average loss in elevation of 0.50 ft. in three years.

Publications: **None**

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