SUMMARY OF PUBLICATIONS

This circular contains summaries of the publications of the Utah Agricultural Experiment Station issued since September, 1923. The publications of this Station are no longer sent to a general mailing list (except in the case of libraries) but are sent only on request. Therefore, copies of any of the publications listed will be sent without charge to those requesting them as long as the supply is available. Check those publications desired, fill in name and address in space provided above (write legibly), place this circular in a stamped envelope, and return to Division of Publications, Utah Agricultural Experiment Station, Logan, Utah, U. S. A.

Bulletin 188—Maintaining the Productivity of Irrigated Land

D. W. Pittman

Much of our irrigated land is rapidly losing its virgin fertility under systems of farming now quite generally in vogue. It is possible to rebuild and maintain the productivity of this soil by proper manuring and crop rotation without greatly changing the present acreage of each of our common crops. This bulletin shows, as the result of 21 years' study and observation at the Greenville Farm, what is the cause of the loss of productivity and how the soil may be restored by proper rotation of crops and the most effective use of manure.
Bulletin 189—Ridding the Land of Wild Morning Glory

George Stewart and D. W. Pittman

This bulletin reports the results of an experiment to determine the most effective way to control or exterminate the wild morning glory which is one of the worst weeds in this district. It was found that sprays were ineffective in killing the roots in this dry climate and that frequency of treatment—either by spray or cultivation—was the most important factor in controlling the weeds. The various methods tried were: (1) spraying with sodium arsenite in three different concentrations and at varying intervals of time; (2) cultivation, both deep and shallow, at varying intervals of time; (3) shading the land with thickly planted crops of sunflowers and corn and with straw stacks and building paper; and (4) pasturing with sheep and with hogs. As a whole, cultivation was better than spraying; shallow cultivation was as good as deep cultivation; frequent cultivation was essential to success; and pasturing and shading were only partially successful.

Bulletin 190—Corn Silage in a Dairy Ration

W. E. Carroll

In this bulletin is given a brief summary of the results of two years' experimental work on the value of corn silage in the ration of milking cows. The method of attacking the problem was such as to make a direct comparison between alfalfa hay and corn silage. Thus the proportion of grain consumed was the same throughout the test. It was fed in proportion to the amount of butter fat given. The smaller cows received approximately 25 pounds of corn silage, while the larger cows were given 30 pounds. In addition to the grain and silage the cows were given all the alfalfa hay they would eat fairly clean. These results indicate that from 2.5 to 2.9 tons of corn silage were required to replace one ton of alfalfa hay under the conditions of the test. Anyone contemplating the erection of a silo or desiring to purchase silage should consider at least approximately the relative values of alfalfa hay and corn silage.

Bulletin 191—Oedipodinae of Utah (Technical)

W. W. Henderson

This bulletin is a taxonomic and ecological consideration of the Oedipodinae. It gives the results of a highly technical study
of the grasshopper order, the purpose of which was to bring to light a correct understanding of the economic species. It is found that a different set of insects constitute the prevailing species of the high, arid lands of the Great Basin than is commonly found to prevail elsewhere. These prevailing species are those common to the sub-family, Oedipodinae, of the family Acrididae, and the order Orthoptera.

For this study, the author has collected Orthoptera from their native haunts in Utah, has assembled all the collections known in the state, and has brought together the literature of the world dealing with the species. With this material, he has redescribed the species, made ample taxonomic distinctions, devised keys for separating and distinguishing the species, figured typical ones, pointed out economic significance, and arranged all in phylogenetic sequence so that biological relations are somewhat clarified.

Circular 49—This Public Domain of Ours
George Stewart

The relation of dry-farm lands to grazing and what lands can safely be used for settlement are important problems. Overgrazing which involves tremendous cattle losses, timber destruction, range erosion and floods cannot be prevented without control of government lands. These topics and others of similar importance are discussed in detail in this circular.

Circular 50—Brooding and Feeding Baby Chicks
Byron Alder

The most important problem of the poultry-raiser during the spring and summer is raising a flock of good, vigorous pullets either to renew the flock or to put into the laying house the coming fall. Failure in this regard means a poor crop of eggs next fall and winter when the price is highest. Good care of the growing pullets from the time they are put into the brooder as baby chicks until placed in the laying house in the fall is just as important for profitable egg production as the care given these pullets during the laying period. The problems of brooding and feeding baby chicks and the methods used and recommended by the Utah Station are given in this publication.
Circular 51—Foot-and-Mouth Disease

H. J. Frederick

This circular describes the present status of foot-and-mouth disease as well as its cause, history, symptoms, differential diagnosis and treatment.

Circular 52—Rules and Regulations for the Utah Intermountain Egg-laying Contest

Byron Alder

General information is given in regard to the egg-laying contest which is to be held by the Utah Agricultural Experiment Station from November 1, 1924, up to and including October 30, 1925.

BLANCHE C. PITTMAN
In Charge of Publications

(College Series No. 196)