this species is thus similar to that described by Allen<sup>1</sup> for S. Donnellii.

MARTHA A. SCHACKE

UNIVERSITY OF WISCONSIN

## THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE —SECTION M—AGRICULTURE

THE program of the Baltimore meeting of the Section of Agriculture was considerably interfered with by sickness and absence in Europe on war service. A single session was held on the afternoon of December 27, 1918. The retiring vice-president, Dr. H. J. Waters, was prevented by sickness from attending the meeting and delivering his address, the subject of which as announced was "The Farmers' Gain from the War."

In the absence of the vice-president, Dr. H. P. Armsby, who is with the Interallied Food Commission in Europe, Dr. A. F. Woods presided over the session. This was devoted to the agricultural situation in Europe as viewed by members of the American Agricultural Commission which spent several months in Great Britain, France and Italy in the early fall.

Describing "Some Impressions of the Effect of War on Agriculture in England and France," Dr. W. A. Taylor reviewed the highly successful efforts in England to stimulate production resulting in 1918 in an increased area in cereals of 32 per cent. and in potatoes of 45 per cent. over the ten-year prewar average. This increase was not due to the existence of an actual shortage, for apparently at no time was there less than three months supply of wheat in sight, or to the expectation of large profits on the part of farmers, but rather to apprehension that conditions might grow worse and to the necessity of saving tonnage. The organization through which the increase was accomplished and the measures put in force under the Defense of the Realm Act were effective and often revolutionary. Local production campaigns were in the hands of agricultural executive com-

<sup>1</sup> Allen, C. E., "A Chromosome Difference Correlated with Sex Differences in *Sphærocarpos*, SCI-ENCE, N. S., 46: 466-467, 1917. mittees, who were authorized when persuasion failed to take drastic action, even to dispossessing tenants and breaking up and operating idle land at the expense of the owners. Restrictions on the crops to be grown, their sale and use were extensive and far exceeded anything hinted at in this country. A reform of much importance was the putting into operation of a seed control measure similar to that maintained in several of the states in this country, which yielded such beneficial results that it is expected to be permanent. The government also controlled the price of certain seeds, as seed potatoes, and to avoid local shortages purchased nearly a million dollars' worth of seed potatoes for sale to commercial growers and allotment holders.

While tenant farmers profited by good prices and reduced competition, land owners were prevented by law from raising their rents during the war despite increased taxes and other expenses. In consequence the sales of land exceed those for a generation, and include not only large holdings but relatively small farms, mostly land not operated by the owners. Purchasers are mainly of the tenant farmer class, and no marked movement of population from the city to the land was noted. There was much evidence of greatly aroused interest in agricultural research, instruction and extension teaching which is expected to bear fruit in increased facilities.

In sharp contrast to Great Britain, France showed abundant evidence of decreased crop production, as was to be expected. In 1917 the production of cereals fell to 53 per cent. of the pre-war average. A return to nearly 75 per cent. in 1918 was "accomplished through most strenuous and exhausting effort and to a considerable extent at the expense of future crops through the breaking up of the best crop rotation practise."

The reconstruction problems in France were described as complicated, one of the most difficult being the remanning of the land. Of the 250,000 farmers of the devastated region it is estimated that perhaps 100,000 may return to their holdings. Much of the land consists of small parcels, the holdings of an owner being more or less scattered, which points to the importance of consolidating these tracts into compact units capable of more economic management. The question of whether the destroyed rural villages should be rebuilt on their old sites rather than to relocate them more advantageously is another matter of considerable importance. A rapidly growing sentiment was noted for the restoration of the devastated region by the invaders, rather than the mere payment of financial indemnity. The French government has already provided a credit of approximately sixty million dollars, from which allowances are being made to farmers who are ready to return to their land. For the most part the restoration of the fields did not impress the commission as being as appalling as might be expected, and was compared with the reclamation of stump land in this country.

Speaking of the Live Stock Conditions in Europe, Mr. George M. Rommel reported that European farmers had been quite successful in maintaining their supplies of breeding animals. Although they have suffered from a shortage of feed and some inroads have been made on certain kinds of stock by the military demands, the number of cows and heifers in Great Britain is fully as large now as before the war, and this is true of cattle generally. The milk supply has been reduced on account of the shortage of concentrated feed, and this has also cut down the number of pigs quite extensively. There was also a small falling off in sheep.

In France there are about two million less cattle than before the war, principally due to invasion. Since the close of 1914 the decline in number of cattle has been less than 2 per cent., the young stock having increased. A similar increase also applies to Italy. Sheep have declined nearly 40 per cent., due largely to labor shortage, and hogs somewhat more due to a lack of concentrated feed. The shortage of milk in France is more serious than in Great Britain. The heavy demand for horses for military purposes has reduced the available number by about a million. The record of the Percheron horses in the British army has excited a good deal of interest among farmers and breeders in England and led to efforts to establish this breed of horses in that country.

Prices of breeding stock were reported as extremely high in both France and England. Breeders are anticipating a good trade after the war and have kept their stocks intact at great expense. Not much demand for live stock from the United States was looked for in the immediate future, although dairy cows may be needed and after the war American horses will doubtless be required in Europe, mainly of the commercial grades.

Mr. E. C. Chilcott, who went to the French colonies at the instance of the French High Commission, was to have described the agricultural conditions found there, especially in Algeria, but was detained by illness.

At the business meeting Dr. A. F. Woods, president of the Maryland Agricultural College, was nominated vice-president, and Dr. J. G. Lipman, director of the New Jersey Experiment Stations, secretary of the section, and these nominations were subsequently confirmed by the general committee of the association. Other officers for the year were elected as follows: Member of the general committee of the association, Mr. George M. Rommel, U. S. Department of Agriculture; member of the council of the association, Dr. A. C. True, U. S. Department of Agriculture; member of the sectional committee (for five years), Professor C. P. Gillette, director of the Colorado Experiment Station.

> E. W. Allen, Secretary

## SCIENCE

A Weekly Journal devoted to the Advancement of Science, publishing the official notices and proceedings of the American Association for the Advancement of Science

Published every Friday by

THE SCIENCE PRESS LANCASTER, PA. GARRISON, N. Y. NEW YORK, N. Y.

Entered in the post-office at Lancaster, Pa., as second class matter