THE JOURNAL OF AGRICULTURE.

[MAY 15, 1913

on the latter side of the house were then reserved for testing this solution, while the Bordeaux mixture was continued on the west side. The plants on the west side received in all nine sprayings of Bordeaux mixture at intervals of about fourteen days; while the east side received three sprayings of Bordeaux previous to the 24th December, 1912, and six sprayings with the carbonate of copper, also at intervals of about fourteen days. No other manures or sprays were used throughout the experiments until the 21st February, 1913, when the plants on the east side were dressed with superphosphates, at the rate of 2 oz. per square yard.

PLANTS.

The plants for sections 1 to 6 were propagated by Mr. Odering from seed supplied by Mr. Maffey, while from the same lot of seed Mr. Maffey raised the plants for sections 7 and 8. The propagating-soil was sterilized by heating to 210 deg. At the time of setting out, the plants in sections 1, 2, 7, and 8 were sturdy, and rather stronger than those in sections 3, 4, and 5, while the plants in section 6 were the weakest, being slightly drawn up, and not so well hardened off as the plants in other sections. Owing to the soil in this house being rather damp and cold, the plants were late in being set out in the permanent rows, and it was not until the 23rd September, 1912, that this work was completed. Many of the plants in section 6 "damped off," and were replaced by other plants, and, later on, some plants received a severe check by eelworm, and were again replaced. When the plants had grown sufficiently for training, pegs were driven in at the end of each row, and a light wire was fastened from this peg to the wall, about 3 in. or 4 in. above the surface of the soil, the twine for training each plant being fastened to this wire close to the base of the stem. This gives the plants more stability, and when spraying or working amongst them saves them from being knocked about. I certainly think this method an improvement on the system of fastening the twine to the plant. Of course it involves more work, but the necessary free movement when working amongst plants is made easier if the plants are securely tied. Many growers, I understand, adopted this method some time ago. With this exception the plants were pruned and trained as recommended by Mr. S. F. Anderson in the Journal of Agriculture, page 118, August, 1911.

SPRAYING.

It will be noticed that Bordeaux mixture, strength 3 lb. of sulph. of copper, 5 lb. of roche lime, and 50 gallons water, which was used no less than nine times, again proved successful in controlling fungoid diseases, including "spot" (*Cladosporium fulvum*). I may state that this solution was always tested with blue litmus paper before applying,

496