mixtures of tribasic copper sulfate-zineb-Agrimycin-100, chloranil-zineb-Agrimycin-100 or thiram-(Thylate)-zineb-Agrimycin-100. The first two mixtures caused a leaf injury when applied during hot weather. The thiram-zineb-Agrimycin-100 mixture did not cause injury and provided excellent control of all the diseases (Fig. 10). This mixture appeared to be especially promising. In view of the possible injury to young seedlings, it is not advisable to employ any of the combinations until the covers are removed, approximately six weeks after seeding. During the first six weeks a "straight copper" program is the safest and most effective.

FIELD DISEASES AND THEIR CONTROL

One of the worst epiphytotics of early blight in the history of the Everglades occurred during the spring of 1957. Hundreds of acres were abandoned and yield from the remaining was reduced greatly. During this period two experiments were run comparing several materials alone and in combination against early blight. A summer pascal type celery was used in both tests. Experimental design consisted of single 50-foot-row plots replicated four times. Each plot row was bounded on either side by an unsprayed guard. Depending on the weather, materials were applied at three to five-day intervals. Nozzle number to the row increased from two, when the celery was young, to a maximum of six as it approached harvest. Corresponding gallonage to the acre range was 56 to 167. Twenty-one sprays were applied during the first test; 20 during the second. For the first test transplants were set February 5 and harvested May 13. Corresponding dates for the second test were February 19 and May 21. Disease indexes were scored visually on a 0-11 basis, where 11 equalled maximum severity.

Test No. 1.—Results of this test are shown in Table 7. The most interesting observation is the outstanding performance of Dyrene from the standpoint of control of early blight. Another was the rather poor performance of zineb (Parzate) at the recommended dosage of 2 lbs./100 gals. Maneb (Manzate) at the recommended dosage was also significantly less effective than Dyrene. Tribasic copper sulfate provided a surprising degree of control, while thiram (Thylate) was intermediate in effectiveness. The Actidione formulations were virtually ineffective.