

odor given off by diseased plants. To some the odor is sweetish in character, to others it is reminiscent of malt, while to still others it is suggestive of scalded celery.

Late Blight.—Late blight, caused by *Septoria apii* (Briosi & Cav.) Chester, is of minor importance in the Everglades. An important diagnostic feature of this disease is the occurrence of black fruiting bodies (pycnidia) near the center of the lesion.

Anthracnose.—This disease, caused by *Colletotrichum* sp., was described only recently (2,3). As with the other leaf diseases, symptoms appear initially as small reddish-brown spots; these gradually enlarge in irregular outline to an area comprising one to three millimeters in diameter (Fig. 5, lower). Their small size is an important diagnostic feature. With age, the center of the spot becomes whitish in color and paperish in texture (Fig. 5, center). Merging chlorotic areas around the spots ultimately give the entire plant a yellowed appearance (Fig. 5, upper).

Rooting Failure.—Celery is seeded on top of the beds, and the seed are not covered. Frequently, the young radicle grows horizontally rather than vertically. When the tip does come in contact with the soil, it may be "burned off". Either lateral roots are formed, anchoring the plant, or the seedling dies. This results in stunted plants and poor stands.

ETIOLOGY

The causal relations of early blight, late blight and bacterial blight are established. A recent report has been made on the new anthracnose (3). There appears to be an area of uncertainty, however, concerning the etiology of the other diseases.

In 1924 Foster and Weber (6) attributed damping-off of celery seedlings to numerous fungi, including *Pythium deBaryanum* Hesse, *Sclerotinia sclerotiorum* (Lib.) DBy, *Fusarium* sp. and *Rhizoctonia* sp. Working in the Sanford area in 1940, Brooks and Kelbert (5) recovered 47 isolates of *Rhizoctonia* and 51 of *Fusarium* sp. from 204 diseased celery seedlings. Later, Townsend (10) stated that damping-off of celery in the Everglades was due chiefly to *Rhizoctonia solani* Kuhn. In 1951 Tisdale *et al.* (8) stated that *Fusarium*, *Pythium*, and *Rhizoctonia* were most consistently isolated from diseased root tips and stems of celery seedlings grown in the Sanford area. Only recently, Swank and Perry (7) attributed damping-off to *R. solani* and *Pythium* sp.