

tablished in the field the plant appears to "grow out". Plants showing 100 percent root infection at time of transplanting may become practically disease-free as new roots are formed. The summer pascal varieties are more tolerant of this disease than are the golden ones.

Early Blight.—As with most leaf diseases of celery, early blight, caused by *Cercospora apii* Fres., is initiated as a tiny circular spot, reddish brown in color. The spot rapidly enlarges to an ultimate size determined by weather conditions and number of spots on the leaf. A single spot may cover practically an entire leaf blade or petiole; it may be circular in outline or quite angular; it may be paperish in texture or watersoaked, thereby providing a greasy appearance.

Under moist conditions, three features set early blight lesions apart from others. These are their large size, the dark gray centers resulting from a profusion of conidiophores and conidia and the large chlorotic areas surrounding the spots (Fig. 4).

The disease is more prevalent on the lower portion of the plant, where free moisture may persist 24 hours of the day. Under such conditions the leaves become completely yellowed (Fig. 1).

Yellows.—This disease has been observed only in a few isolated instances. Once established in the seedbed, soil fumigation becomes necessary or a new plant bed site must be selected. The golden varieties are more susceptible than the pascal varieties. The disease is first evidenced by a chlorosis of the leaf resulting in vein clearing. A vascular discoloration is usually associated. Infected plants become severely stunted and may eventually die.

Bacterial Blight.—Although bacterial blight, caused by *Pseudomonas apii* Jagger, appears to be primarily a seedbed problem, it occurs to some extent in the field. The damage it inflicts in the field is not clearly understood. It is believed that it frequently occurs in the same lesion with, and overrun by, the early blight organism (2).

Bacterial blight lesions may be confused easily with those of early blight. Characteristically, they are smaller, more angular, have a deeper red color and are more watersoaked in appearance than are the early blight lesions (Fig. 4). Neither do infected leaves develop chlorosis as rapidly nor to the same extent as those of early blight. Still another, and the most unusual, method of identification is the detection of a characteristic