1964 PEA DISUSE SURVEY IN THE OTTAWA AREA

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Powdery mildew was the most important disease on field peas on the Central Experimental Farm and adjacent areas this past summer, This disease, caused by Erysiphe polygoni DC., increased considerably near maturity of the pea crop. All fields examined were slight to moderately infected. The variety Arthur appeared to be more susceptible than Century or Chancellor as all plants in a one-acre plot were moderately infected. As the disease incidence was low during most of the growing season only a slight drop in yield could be expected. The disease intensity in Century and Chanoellor was much lower than in Arthur with about 1/10 of the plants affected to a slight degree.

Ascochyta blight (Mycosphaerella pinodes (Berk. & Blox.) Vest.) was present only on the variety Century. Although this disease infected only a few plants to a moderate degree, the susceptibility of this variety to blight is causing oonsiderable concern to growers of field peas, particularly in Manitoba. Seed produced in that area is heavily infected with M. pinodes. Century first became popular because of its high yielding capacity and its resistance to leaf and pod spot (Ascochyta pisi Lib.). Ascochyta pisi was found infecting a few plants of Arthur, Chancellor and Century but the disease severity was low.

Pea rust (Uromyces fabae (Lib.) De Bary) caused a slight infection on the variety Arthur. Only a few plants were infected in localized areas in the field.

Although certain virus diseases were present on the three varieties Arthur, Century and Chancellor none caused any appreciable damage. Enation pea mosaic was present on a few plants of the varieties Chancellor and Century. Considerable pod damage resulted on affected plants. Pea streak was present on a few plants in a field of Arthur peas and pods had failed to fill out. Common pea mosaic infected two plants in a small plot of Arthur pea.

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