

Variations in *Fusarium lini*. BORLAUG, N. E., AND J. J. CHRISTENSEN. Isolates of *Fusarium lini*, obtained from many regions in the United States and Canada, differ greatly culturally and parasitically. Studies indicate that *F. lini* comprises numerous races some of which differ widely in pathogenicity on flax varieties previously or now grown in the Northwest. Bison is resistant to all races, except 6W, while Linota and North Dakota R114 are susceptible to most races. Pergamino No. 6098, an Argentine variety, is resistant to all races of *F. lini* tested, but very susceptible to an unidentified species of *Fusarium*, to which Bison also is susceptible. Chippewa and Winona, distributed previously as resistant varieties, but now susceptible in the field, have retained their resistance to some of the races of *F. lini*, but are highly susceptible to others. Some races are relatively stable in culture; others give rise to numerous variants that differ from the parental types in cultural characters and parasitism. The results indicate the importance of testing new varieties of flax to as many races of the pathogens as possible before they are generally distributed, since the breakdown of resistance may be attributed to the introduction or development of new physiologic races of *F. lini*.