EFFECT OF SEED INJURY UPON THE GERMINATION OF 

*PISUM SATIVUM*¹

H. W. HULBERT AND GERALD M. WHITNEY²

Peas to be marketed for seeding purposes must be high in vitality. Numerous mechanical, weather, and insect injuries occur during the growing and processing of the crop. The drilling, threshing, cleaning, and processing of seed peas causes considerable mechanical injury to the seedcoats and cotyledons. Seedsmen object to seeds with broken seedcoats because of the possibility of lowered germination. Moreover, mechanically injured seeds in a lot of peas fail to possess a good marketable appearance.

Sun scald is the most serious type of weather injury found in seed peas in Idaho. Injured seeds are characterized by a wrinkled appearance, and a loose, discolored seedcoat, which chips off readily.

The pea weevil is the most important insect enemy of the pea in the Palouse area. This insect consumes a large portion of the endosperm in its development. Weevil-infested peas are probably of little value for seeding purposes.

EQUIPMENT, MATERIAL, AND METHODS

In 1933 tentative federal standards for dried peas were promulgated by the U. S. Dept. of Agriculture. The thresher injury data herewith presented were secured from the thresher-run pea samples graded at the federal laboratory located at Moscow.

The drill injury data were obtained by running the seed through a 7-foot force-feed Superior drill that is used on the University Farm in seeding pea variety trials. In each determination the drill feed regulator was set at the desired rate of seeding and the drive wheel rotated a sufficient number of times to seed a 1/40-acre plat. Two hundred gram samples, taken from the entire lot by a Boerner sampler, were used for the injury analyses.

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²Agronomist and Research Assistant, respectively.