

White Mold

White Mold, also known as Sclerotinia Stem Rot, has developed with increasing frequency in Minnesota soybean fields. Planting less susceptible varieties in wider row spacings and at lower populations are the most effective methods of reducing disease severity. Accurate ratings for soybean variety resistance to white mold are difficult to obtain because both infection and disease development are dependent on weather conditions during and after flowering. Because of this variability, a variety's performance can change significantly among locations and years depending on the interaction of plant development, precipitation, and temperature in a season. Growers concerned about variety performance in the presence of white mold should plant varieties that show consistently less white mold in several years of testing.

In 2000, adapted soybean varieties were evaluated under field conditions in the three soybean maturity zones in Minnesota; Southern, Central, and Northern. Disease development was promoted by irrigation, inoculation of fields with sclerotia, and rotation with a crop susceptible to white mold. Significant white mold developed at four of the seven locations where variety evaluation plots were planted. Tests were conducted by J. E. Kurle, Department of Plant Pathology, University of Minnesota. Data collected consisted of ratings of white mold incidence (percentage of plants infected), lodging severity, and yield.

Varieties were ranked in order of increasing susceptibility to white mold.

Additional white mold management information is available from Minnesota Soybean Research and Promotion Council, 360 Pierce Avenue, Suite 110, North Mankato, MN 56003, 1-888-896-9678, www.mnsoybean.org.