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WHITE MOLD OF GARBANZO BEANS (P 1) GLOSSARY OF COMMON MOLECULAR BIOLOGY ACRONYMS (P 2)

WHITE MOLD OF GARBANZO BEANS

A recent Plant Disease Note (84:1250, 2000) by M. Matheron and M. Porchas discussed the first report of stem and crown rot of Garbanzo Bean (chickpea) by white mold (*Sclerotinia minor and S. sclerotiorum*) in southwestern Arizona. Symptoms included wilting of leaves and stem death (necrosis) of individual branches, followed by entire plant necrosis and death. White mycelium was present on plant stems near the soil surface, and black sclerotia formed on diseased tissues. Disease was more severe in areas of the field that were heavily irrigated and/or that followed recent plantings of lettuce, which is also susceptible in Arizona and elsewhere.

Since *S. sclerotiorum* also affects dry bean, soybean, sunflower and other crops throughout Colorado, this pathogen could become a problem on garbanzo beans grown in areas like southwestern Colorado near Yellow Jacket and Dove Creek. Manage with crop rotation (small grains) and avoid over-irrigation. (Schwartz)

Colorado State University, U.S. Department of Agriculture and Colorado counties cooperating. Cooperative Extension programs are available to all without discrimination.



BIOTECH TALK

A recent Plant Disease article (84:1160-1170, 2000) by R. P. Wise entitled "Disease Resistance: What's Brewing in Barley Genomics" contained a useful glossary of common molecular biology acronyms. Examples include:

- AFLP = amplified fragment length polymorphism; adapted to linkage mapping.
- cDNA-AFLP = utilizes mRNA populations from different genotypes as a template for AFLP analysis.
- PCR = polymerase chain reaction.
- RAPD = random amplified polymorphic DNA.
- RFLP = restriction fragment length polymorphism, is a technique in which organisms may be differentiated by analysis of patterns derived from cleavage of their DNA.
- DNA marker = any PCR or hybridization-based assay that allows the pinpointing of a particular position on a genetic map.
- Polymorphism = a visible or molecular difference between two contrasting individuals.
- Microarray "Gene Chip" = with the invention of the DNA chip, researchers are now able to investigate 10,000 genes at a time. Tiny spots of DNA originating from these genes are spotted on a glass slide. This slide is hybridized with two contrasting fluorescently labeled cDNAs representing different "genetic states". With the aid of computer software, an investigator can measure the expression of thousands of genes simultaneously. (Schwartz)

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Sincerely,

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