CROP RESIDUES AND AMENDMENTS ON SURVIVAL AND CONTROL OF SCLEROTIUM ROLFSII IN VITRO

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Soil amendments including crop residues and chemical compounds were used in the powder form and aqueous extracts to investigate their effects on germination and production of secondary sclerotia of Sclerotium rolfsii Sacc. in vitro. The preparation of glyricidia, margosa, ipil ipil, maize and adhathoda drastically reduced or arrested the production of secondary sclerotia. Of the chemical amendments urea, sulphur and zinc chloride suppressed the germination of sclerotia when mixed with soil at the rate of 0.75% (w/w). Germination of sclerotia of different fungal isolates were found to be dependent upon the quantity and the type of amendment either singley or in combination.

Dried leaves of glyricidia and maize showed a substantial reduction in the incidence of cowpea collor rot caused by S.rolfsii. Sulphur on 0.2% concentration effectively controlled the disease when soil drenched at early stage of the crop. However, application of urea at less than ,0.2% level increased the susceptibility to the disease.