

Potential antagonistic activity of actinomycetes to control *Stenocarpella maydis* in maize seeds. Bressan, W.^{1*}, Figueiredo, J.E.F.¹; ¹Embrapa – Maize and Sorghum Research Center, P.O. Box, 151, Sete Lagoas, MG. E-mail: . Atividade antagonista potencial de actinomicetos no controle de *Stenocarpella maydis* em milho.

The effectiveness of actinomycetes designated as *Streptomyces* spp. isolates, DAUFPE 11470 and DAUFPE 14632, was evaluate *in vitro* and under greenhouse conditions for control of *Stenocarpella maydis* in maize seeds. *S. maydis* incidence was detected in all subsamples of disease maize seeds by *in vitro* survey test, and ranged from 10.8% to 65.2%. In a filter paper test with surface-desinfested seeds inoculated with *S. maydis*, *Streptomyces* spp. isolates DAUFPE 11470 and DAUFPE 14632 significantly reduced ($p<0.05$) the pathogen incidence by 93.2% and 92.3% respectively. Seed germination in the same treatments was increased by 30.0% and 28.2%, respectively. Treatments of non-desinfested seeds with the isolates DAUFPE 11470 and DAUFPE 14632, under greenhouse conditions, reduced disease incidence in the seedlings by 87.3% and 85.6% respectively. The reductions in disease incidence in surface-desinfested seeds were 85.0% and 83% for the same isolates. Sedling emergence significantly ($p<0.05$) increased in desinfested and non-desinfested seeds inoculated with the *streptomyces* spp. isolates. The results indicate the potential of using actinomycetes as an additional tool to control *Stenocarpella* ear rot by significantly reducing the incidence of *S. maydis* in maize seeds and seedlings.

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Grupo do patógeno: Fungo

Espécie do patógeno: *Stenocarpella maydis*

Espécie da hospedeira: *Zea mays*

Nome vulgar do hospedeiro: Milho



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DECLARAÇÃO

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