

BASELINE SENSITIVITY OF *Amphobotrys ricini* TO FLUAZINAM AND THIOPHANATE-METHYL

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RESUMO

Amphobotrys ricini is the causal agent of castor gray mold, one of the most destructive diseases of castor crops. Fungicides are frequently used to manage plant diseases, however no information on the baseline sensitivity of *A. ricini* to fungicides is available. The aim of the present work was to determine the baseline sensitivity of *A. ricini* to the fungicides fluazinam and thiophanate-methyl based on 47 isolates from Goiás ($n=3$), Maranhão ($n=1$), Mato Grosso ($n=12$), Paraíba ($n=3$), Rio Grande do Sul ($n=18$) and São Paulo states ($n=10$). Mycelial disc (6 mm) removed from 4-day-old colonies were transferred to Petri dishes containing Potato-Dextrose-Agar (PDA) amended with the fungicides in different concentrations. The Petri dishes were then maintained in the dark for 4 days at 25 ± 1 °C. The evaluation consisted of two perpendicular measurements of the radial fungus growth, which were used to calculate the percentage of mycelial growth inhibition for each treatment (isolate×fungicide×concentration) related to the control. The data of the percentage of mycelial growth inhibition were used to obtain the effective concentration to inhibit 50 % of the fungus mycelial growth (EC_{50}) by means of linear regression. The mean EC_{50} for fluazinam was 0.1654 ± 0.0879 $\mu\text{g mL}^{-1}$ and for thiophanate-methyl 0.3591 ± 0.0903 $\mu\text{g mL}^{-1}$. Based on the mean EC_{50} obtained in the present work, it was possible to conclude that both fungicides have high intrinsic toxicity to *A. ricini* and they could be an alternative to manage the disease once their efficiency have been corroborated under field condition.

APOIO

CNPq, Petrobras