Antimicrobial Activity of Catechol and Pyrogallol as Allelochemicals

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Z. Naturforsch. **61c**, 639–642 (2006); received March 3, 2006

Catechol and pyrogallol are allelochemicals which belong to phenolic compounds synthesized in plants. Their antimicrobial activities were investigated on three bacteria (*Pseudomonas putida, Pseudomonas pyocyanea, Corynebacterium xerosis*) and two fungi (*Fusarium oxysporum, Penicillium italicum*) phytopathogenic species as test organisms using the disc diffusion method. Both catechol and pyrogallol were found to have antibacterial effects on all the bacteria used in the study at 5 and 10 mM concentrations. Catechol has also been found to have an antifungal effect on the fungi used in the study, whereas no antifungal effects of pyrogallol were observed. The most sensitive species among the bacteria was *P. putida* which was inhibited by the allelochemicals even at 1 mM concentration.

Key words: Allelochemical, Antimicrobial Activity, Catechol, Pyrogallol