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**Herbicide-induced Resistance to Fusarium Wilt in Cotton and Gossypol
Production of Host Cells**

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Abstract: Pretreating cotton seeds with some herbicides used in cotton-growing areas of the Çukurova region markedly increased cotton resistance to Fusarium wilt caused by *Fusarium oxysporum* f. sp. *vasinfectum*. Haloxyfob and linuron reduced the mycelial growth of the pathogen in both solid and liquid cultures. However, prometryn was more effective in plant development than linuron and haloxyfob. Synthesis of Phytoalexin gossypol was significantly produced in inoculated cotton plants compared with uninoculated control plants. Maximum amounts of gossypol production were obtained in herbicide-treated and inoculated cotton plants. Gossypol extracted from herbicide-treated plants markedly reduced the mycelial growth of the pathogen in vitro.

Key Words: Cotton, *F. oxy. f. sp. vasinfectum*, herbicide, induced resistance, gossypol

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