

Vegetative Compatibility Groups in *Verticillium dahliae* Isolates from Cotton in Turkey

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Verticillium dahliae Kleb. with a complicated genetic diversity is a widely distributed major pathogen resulting in cotton wilt, which causes high economic losses in cotton lint production in the cotton belt of Turkey. A collection of 70 Turkish *V. dahliae* isolates (68 from wilted cotton plants in 28 districts and two from watermelon plants in two districts) were tested for vegetative compatibility by observing heterokaryon formation among complementary nitrate-nonutilizing (*nit*) mutants. The mutants were tested against international reference tester isolates and also were paired with one another. Thirty-nine isolates were assigned to vegetative compatibility group (VCG) 2B, 19 to VCG2A and three to VCG4B. One isolate was self-incompatible and eight others could not be assigned to any of the identified VCGs because their *nit* mutants showed negative reactions with the tester isolates of four VCGs or their *nit* mutants reverted back to the wild type. This is the first report of VCGs in *V. dahliae* from cotton in Turkey.

KEY WORDS: Verticillium wilt; *nit* mutants; VCGs; *Gossypium hirsutum*.

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