The Effect of Temperature Stress on Pathogenicity of *Verticillium dahliae* Kleb in Cotton

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Abstract: A same strain of *Verticillium dahliae* Kleb in cotton was cultured one generation after another till to the 11th generation under four different temperature levels(15～30℃). The result showed that temperature had obvious effect on Pathogenicity of *Verticillium dahliae* Kleb. Under four different temperature levels the Pathogenicity became weaker at first and then stronger along with the generation going ahead. The higher the temperature, the more obvious the effect on Pathogenicity of the strain. Pathogenicity of the 11th generation under 30℃ is obviously stronger than that of the contrast. It also indicated that Pathogenicity of a strain is becoming stronger under the stress of higher temperature and longer time. The temperature also takes effect on the characteristics of the strain's indoor culture. The higher the temperature, the fewer the nuclei.

Key words: Cotton; *Verticillium* wilt pathogen; Pathogenicity; temperatures tress