In Pakistan, Dwarf Cavendish bananas are grown on 30,000 ha with an annual production of 141,200 tons. In 2012-13, bananas grown in the district of Thatta (Sindh province) came down with an unknown disease, which was also observed in the Hyderabad region. Severely affected plants showed a conspicuous yellowing, followed by their death. Cross-sectioned pseudostems disclosed the presence of reddish-brown to dark-brown discoulouration of vascular tissues and rhizome. Fruits had a reduced size. Isolations carried out on PDA from pseudostem, rhizome and roots yielded the consistent recovery of *Fusarium oxysporum* f. sp. *cubense*, the agent of Panama disease, which was identified based on morphology of: (i) macroconidia, sickle-shaped mostly 3 septate (occasionally 5 septate), pointed at both ends, 30-60×3-5 µm in size, borne on single phialides; (ii) microconidia, kidney shaped, without septation, produced on false heads, 5-12×3-5 µm in size. The optimum temperature for colony growth and sporulation was 25°C and 30°C, respectively. For pathogenicity tests, 12-week-old banana plantlets of cv. Basri were inoculated with 30 ml of a conidial suspension (106 conidia/ml). Wilt symptoms developed after 45 days on the inoculated plants from which the same fungus used for inoculation was recovered. Thus, Pakistani banana plantations are affected by Panama wilt, a devastating disease that has damaged thousands of hectares of banana plantations in different parts of the world (Ploetz, 2000). The cultivation of banana in Pakistan is at high risk, as Panama wilt has the potential to cause losses similar to those induced by the epidemic of banana bunchy top disease, which virtually eradicated banana cultivation from the Sindh in 1980s (Khalid *et al.*, 1993).
