

Phytopathogenic fungi, *Phytophthora palmivora* and *Phytophthora megakarya* continue to be a major threat to cocoa production worldwide. To counter these drawbacks, producers rely heavily on agrochemicals leading to pathogen resistance and environmental hazards. There is also increasing demand by cocoa consumers for pesticide-free seeds. Therefore, biological control through the use of natural microbial antagonists is more rational and safer crop management option. The plant-associated *Bacillus amyloliquefaciens*, ESI was selected in vitro, among seven other *Bacillus* species as the most promising, using the zone of inhibition techniques. The *B. amyloliquefaciens* together with two other laboratory contaminants, *Aspergillus* and *Penicillium* spp. were used to control black pod disease of cocoa caused by *P. palmivora* and *P. megakarya* on detached cocoa pods and under field conditions. Even though all the eight bacterial isolates inhibited the black pod fungi in vitro, *B. amyloliquefaciens*, ESI inhibited *P. palmivora* with the highest inhibition zone of 21.21 mm and *P. megakarya* with 16.00 mm. The *Aspergillus* and *Penicillium* spp. also inhibited *P. palmivora* with an inhibition zone of 22.41 and 16.81 mm, respectively. Detached cocoa pod areas protected with broth suspensions of the three microbial antagonists and challenged with a zoospore suspension of *P. palmivora*, completely prevented black pod lesion development. Field pods sprayed with individual microbial broth suspensions and their mixtures and also challenged with a zoospore suspension inoculum, controlled black pod disease with percentage disease control ranging from 53.33-66.67% in the minor season and 40.00-66.67% in the major season. Results clearly show that these antagonists have the potential to be developed as biocontrol agents for the management of black pod disease of cocoa. Key words: Biocontrol agents, pathogenic fungi, microbial antagonists, inoculum, *Bacillus amyloliquefaciens*, *Aspergillus* sp. and *Penicillium* sp.