

How will climate change affect oil palm fungal diseases?

ABSTRACT

Palm oil is a very important commodity. It is added to numerous products and is a biofuel. However, oil palms (OP) are subjected to fungal diseases of which Fusarium wilt and Ganoderma rots are the most important. Considerations of how climate change (CC) affects tropical economic plants are limited and for OP are even fewer. The margin for adapting to higher temperatures and changing humidity is reduced in tropical OP. Land will become increasingly unsuitable for growing OP and the plants will become stressed allowing ingress of fungal diseases. New land will be increasingly suitable where the environmental conditions are less severe than in the tropics. Novel diseases may threaten the crop. Finally, the effect of the major consequences of CC on OP fungal diseases is considered herein with a view to establishing key hypotheses.

Keyword: Oil palm; Climate change; Ganoderma; Fusarium