

Pink disease of cocoa

Erythricium salmonicolor



Infected cocoa branch showing typical pink encrusted fungal growth on the surface (A. Y. Akrofi, Cocoa Research Institute of Ghana)



Infected cocoa branch showing orange pustules (A. Y. Akrofi, Cocoa Research Institute of Ghana)

Prevention	Monitoring	Direct Control	Direct Control	Restrictions
<ul style="list-style-type: none"> Plant at or thin out cocoa trees to the recommended spacing of 3m x 3m. High humidity favours the disease, using correct spacing can reduce this Shade reduction reduces the chance of the disease - ensure the correct level of shade is used on the farm (5-8 trees/ac) and prune cocoa in March/April, clear weeds 3-4 times a year Avoid planting susceptible shade trees (rubber, citrus, mango, Gliricidia) which act as a host to the disease Ensure proper nutrition of cocoa trees through fertilization - see COCOBOD list for recommended fertilisers and rates of application Use improved hybrid planting materials from COCOBOD Seed Production Division 	<ul style="list-style-type: none"> If untreated this disease can kill cocoa trees but the disease is difficult to detect in the early stages Look out for dieback (sudden death) of infected branches and twigs, the leaves on these branches will turn brown and die. The dead leaves remain to the trees for several weeks before falling The fungus grows on the bark and can take several forms: pink/salmon encrusted growth coating the branch, white fungal growth which looks like a cobweb, orange fruiting bodies or cream coloured pustules Other symptoms can include lengthwise cracks in the bark, brown dried flowers and mummified pods Take action when the first symptoms are seen in the field 	<ul style="list-style-type: none"> Prune out the infected branches at least 30cm below any sign of the disease If the fungus has infected several branches, consider coppicing and allow re-growth from the stump Do not leave the pruned branches with pink disease on the farm, otherwise spores will continue to develop and infect the remaining trees, bury or burn to destroy Remove alternative host shade trees (rubber, citrus, mango, Gliricidia) 	<ul style="list-style-type: none"> When using a pesticide or botanical, always wear protective clothing and follow the instructions on the product label Do not use chemicals with the same mode of action year after year as this can lead to resistance Always consult the most recent list of registered pesticides of MOFA, Ghana Apply any copper-based fungicide approved by COCOBOD - the mixture can be sprayed or applied as a paste (if multiple branches on the same tree are infected) Copper hydroxide (Kocide 2000 DF, Funguran-OH, Champion, Kentan). Apply at 100g/15 L of water. A protectant with multisite action, FRAC Group M1 Copper oxide (Copper Nordox Super 75). Apply at 75 g/15 L of water. A protectant with multisite action, FRAC Group M1 	<ul style="list-style-type: none"> WHO Class II (Moderately hazardous). REI-24 hrs. Spray affected branches every 3-4 weeks WHO Class II (Moderately hazardous). REI-24 hrs. Spray affected branches every 3-4 weeks



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CREATED/UPDATED: May 2016

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