

PEZZIZA: FRIEND, INDICATOR AND NUISANCE

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Many fungi abide in soils. Some are resistant to heat and survive soil steaming. Some appreciate a diet of cellulose. Pezziza ostrachoderma falls into both categories.

A week or so after a greenhouse soil is pasteurized, a fungal growth may begin to cover the soil surface if it is left undisturbed. It begins as white sporophores. As the spores begin to mature, they turn yellow, then brown. If the spores are pink, the fungus is a Pyronema sp. A puff of wind will waft untold myriads aloft to inoculate soils for miles around. This is an indication of overpasteurization.

Greenhouse soils are generally steamed until the soil temperature reaches 180°F (83°C) and maintained at this temperature for a half hour. Too often this is done by guess! and by golly! And too often the "by golly" part is "too hot." When the temperature is too high for too long, most of the competitive soil microflora is killed allowing Pezziza to grow unimpeded.

Pezziza is most adept at "eating" cellulose. You may have seen it growing on the surface of propagating blocks such as the Kys-Cubes in Figure 1. These are manufactured at high temperatures and contain a lot of cellulose. They make a favorite locale for colonization by Pezziza.

Pezziza is a saprophyte. It lives on organic material in the soil. It hasn't been known to attack any living plant. Overpasteurization kills beneficial bacteria that assist in reducing disease by competing with pathogenic organisms. Pezziza growth is an indicator of overpasteurization.

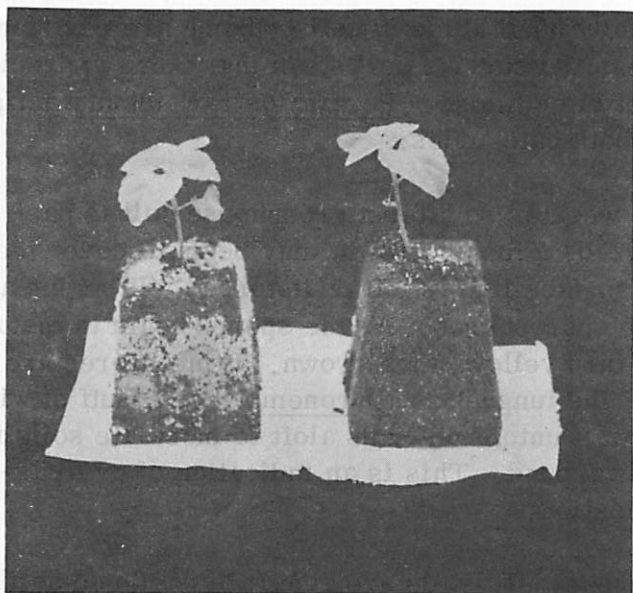


Figure 1. Pezziza sporulating freely on surface of the propagation cube on the left.