

COMMENTS

Both strains of this heterothallic Podospora produce a Phialophora anamorph - #185 much more prolifically than #250-8. However, we have been unable to germinate the conidia and suspect that they may have a spermatial function. We have grown both strains separately on many media under a variety of conditions and no fertile perithecia have ever been produced. Occasionally strain #185 will produce early stages in perithecial development when whole autoclave-sterilized wild rabbit droppings are added to Difco CMA -- and even rarely a typical-appearing ascus-free perithecium. We standardly grow our cultures on Difco corn meal agar but conidial production on that medium is rather scant. Modified Leonian's agar, Weitzman Silva-Hutner's agar and oat agar give better results. The recipes for the first 2 are as follows (from Malloch, D. 1981. Moulds, their isolation, cultivation and identification. Univ. of Toronto Press, Toronto, Canada. 97 pp.):

Weitzman and Silva-Hutner's Agar (WSH)

Alphacel-----	20g
Pablum baby oatmeal-----	10g
Hunt's tomato paste-----	10g
KH ₂ PO ₄ -----	1.5g
MgSO ₄ -----	1.0g
NaNO ₃ -----	1.0g
Agar-----	20g
Distilled water-----	1000ml

Modified Leonian's Agar (ML):

Maltose-----	6.25g
Malt Extract-----	6.25g
KH ₂ PO ₄ -----	1.25g
Yeast Extract-----	1.0g
MgSO ₄ -7H ₂ O-----	0.625g
Peptone-----	0.625g
Agar-----	20g
Distilled water-----	1000ml

Oatmeal agar: various formulations

The above media (and CMA augmented with sterile dung) produce the Phialophora anamorph in greater abundance than does CMA alone.

We have worked with many Podosporas over the years, and know of no naturally occurring heterothallic species. Until recently, we mistakenly assumed that our species was homothallic and that we weren't meeting some requirement for sporulation. So we had prepared to publish the new species based primarily on ascosporic material from dung incubated in moisture chambers. The species is not uncommon (despite its absence from the literature) and between Nils Lundqvist in Sweden, Laura Lorenzo in Argentina and ourselves in New Zealand, we have over 20 collections of the fungus, dating back to 1981. The article describing it will soon be submitted to MYCOLOGIA with all 4 of us coauthoring it - Nils will be the senior author and he is listed as the authority for the species. Cultures have been accessed by ATCC and CBS although I don't know how they preserved them. I assume that they must have used liquid