

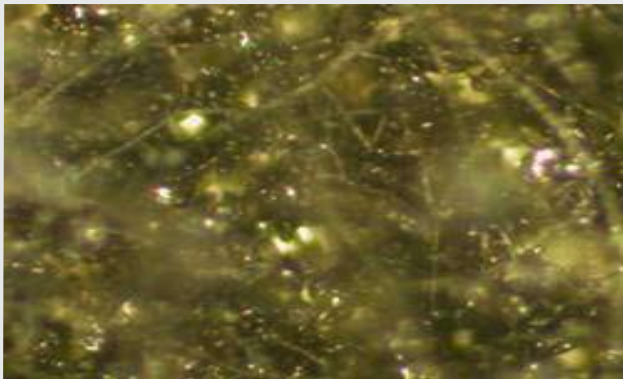
## Improving Isolation Results: Undernourishing fungi using unamended agar or medium with scant nutrients

Julia W. Thompson

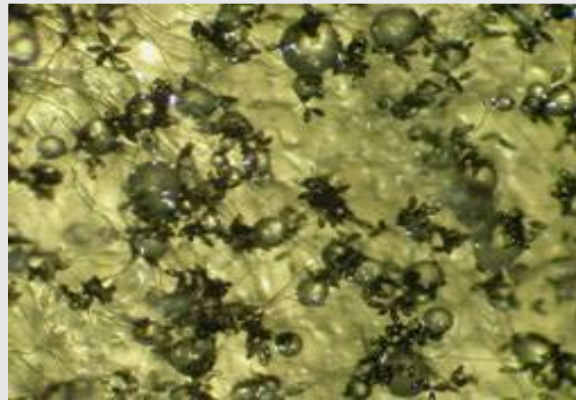
Missouri Dept. of Agriculture

## Diagnostic Tip of the Month

In the press of apparently unlimited samples and all too limited time it may be a little too long before an isolation attempt is reexamined. Important details may be difficult to determine amidst flourishing mycelium. If you have also plated onto a medium with more limited nutrients these details can sometimes be seen with much less trouble.



A culture growing on Difco™ potato dextrose agar (PDA) (39 g / liter water) viewed with a dissecting scope. Spores are present but much definition is lost because of their abundance and because of the abundant mycelium on the surface of the culture. Spores may be knocked loose when making slides making it difficult to determine how they are borne on the conidiophores.



The same isolate at the same age and magnification on quarter strength PDA ((9.75g Difco™ potato dextrose agar + 11.25 g agar) / liter water). More of the characteristics are readily apparent.



The same isolate at the same age and magnification on unamended agar (15g agar/ liter water). Conidiophores and spores are easily seen. To see still more detail you can put a cover slip on a drop of water or stain that has been placed directly onto the surface of the agar and use a compound scope to view the culture.