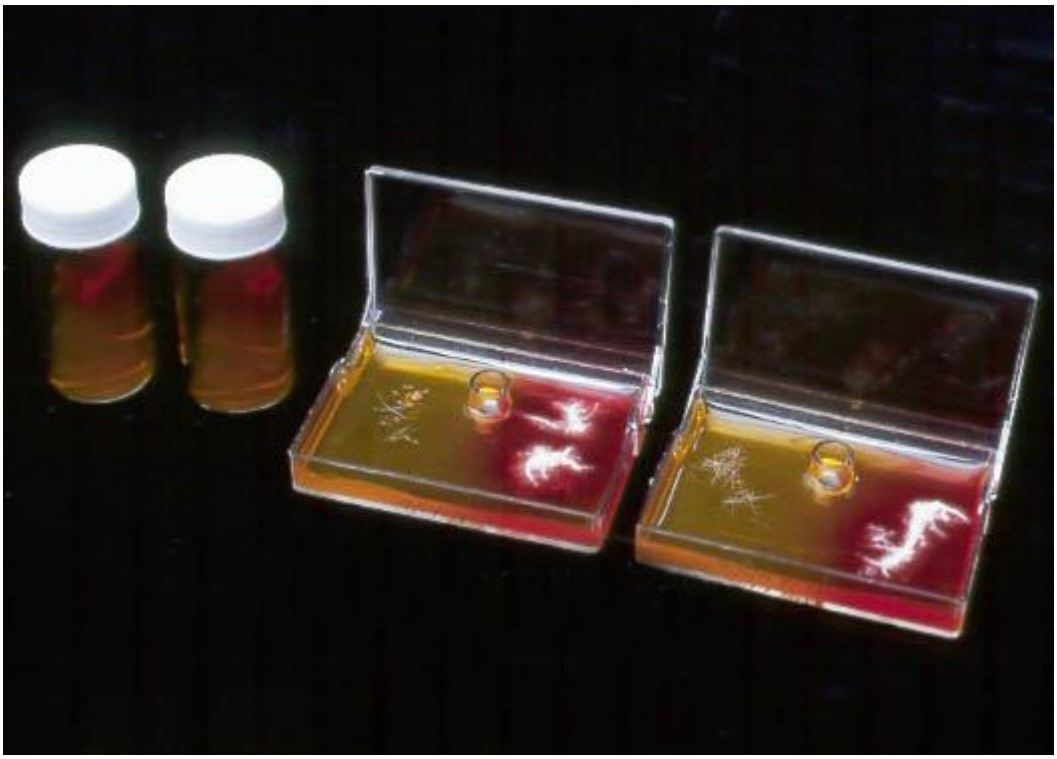
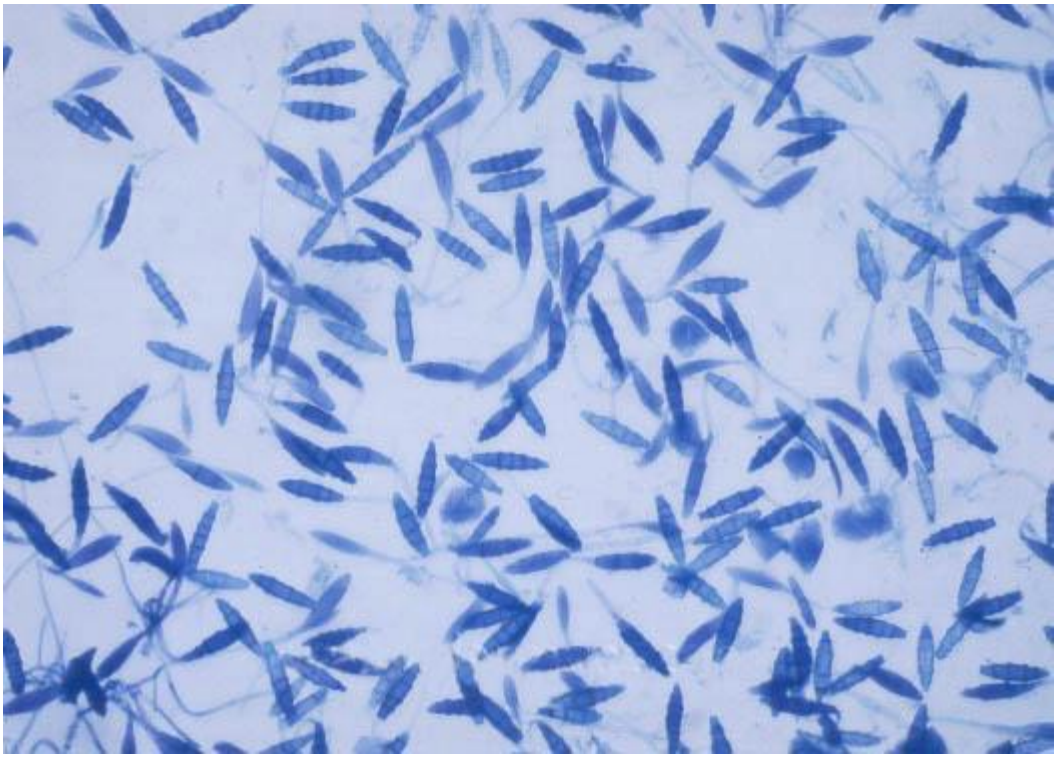
Articles



Fun With Fungus

April 2004

Sab-DuetGently collect hairs from the periphery of the lesions and view them with mineral oil and a cover slip. With practice, ectothrix arthroconidia spores may be seen surrounding the hairs but there are also many false positives and negatives, so a fungal culture is necessary.Fungal Culture: Culture is the gold standard. Use hairs collected from lesions and embed them in the DTM. We prefer the Mackenzie toothbrush technique in which a new unwrapped toothbrush is used to brush suspected areas (or the entire animal in asymptomatic animals) and is then gently impressed into the DTM. We have the best results from using the Sab-Duet DTM from BactiLab (See right). The Sab-Duet contains 2 wells side by side, one with the familiar phenol red pH indicator-containing DTM and a second well that contains plain Sabouraud's dextrose agar which can more easily grow diagnostic macroconidia. The plates should be cultured in the dark at 30% humidity and 30ºC and observed daily for 14-21 days (longer incubation times are necessary in animals receiving antifungal medictation). Dermatophyte colonies are usually white or tan and will never be darkly pigmented. Fungal culture media color change occurs simultaneously with dermatophyte growth. If the gross morphology of the colony and culture media color change look suspicious, collect spores from the fungal colonies by gently touching clear scotch tape to the colony, then place tape on a slide over 1-2 drops lactophenol blue or other blue stain (see below). Diagnostic macroconidia may take 7-21 days to develop.



Treatment of Dermatophytosis

For localized lesions topical clotrimazole, miconazole, ketoconazole, terbinafine or naftifine twice daily can help speed resolution. In dogs with fungal kerions and focal lesions that are very inflamed, topical antifungals that contain a steroid such as Panalog®, Tresaderm® or Otomax® can be helpful in reducing inflammation.