Cytology of Species in *Trichophyton*

By

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SUMMARY

The dermatophytes studied were found to be quite complex organisms. They were found to be capable of hyphal fusions, formation of intrahyphal hyphae and fusions of intrahyphal hyphae inside the old hyphal wall. They were shown to have cytoplasmic streaming and cytoplasmic pumping. The ultrastructural aspects of ascosporulation were delineated in T. terrestre. The fine structure of asexually derived microconidia was also defined.

With the exception of arthrospore formation, the role of the complex actions of these pathogenic fungi in disease has not been determined. Since the formation of intrahyphal hyphae is a mechanism used by these fungi to repair themselves, it is very possible that the formation of intrahyphal hyphae may be important during diseases such as ringworm in man.