The Iowa Science Teachers' Journal

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The cover photograph by Dr. M. A. Rosinski of The University of Iowa Department of Botany shows a *Panus tigrinus*, a very common species of mushroom that grows primarily on dead River Birch (*Betula nigra* L.) but occasionally on other hardwood species in Iowa. It has been the subject of research at The University of Iowa because it produces its fruits readily on a defined and simple nutrient medium consisting of glucose for energy, ammonium tartrate as a nitrogen source, one vitamin (thiamin), and the essential mineral elements. Several taxonomic, ecological, and physiological questions about this species have already been answered and numerous others are in the process of being answered—such as what factors, genetic and physiological, affect the development of the highly differentiated mushroom from the less well differentiated mycelium (mold) stage.