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Application of *Neurospora crassa* in the Treatment of Waste

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The nutrient requirements of the fast growing filamentous fungi *Neurospora crassa* to convert animal waste into an edible product containing high amounts of protein were assessed by selectively excluding nutrients from supplemental solutions of Vogel salts and trace elements added to the waste. When individual chemical components were omitted from the supplemental solutions, varying levels of growth were observed. However, there was no statistically significant difference. Similar results were obtained when groups of selected compounds were omitted from the supplemental solutions. Overall, these results suggest that the nutritional requirements for sustainably growing *Neurospora crassa* on animal waste may not be as stringent as anticipated. Therefore, commercial implementation of the *Neurospora crassa* project may be more achievable.

Information about the Authors:

Matthew Przybyla is majoring in biology as well as minoring in both chemistry and Chinese. Because of his educational background and interest in these three subjects, he seized the opportunity to work on and to extend his genetics professor's research in not only the United States, but China as well. John Wunderlich is a senior majoring in biology with a chemistry minor. The research of *Neurospora* growth at Valparaiso University and Zhejiang University appealed to him because of his interest in biology, sustainable agriculture, and international science. He plans to continue pursuing a career in secondary education.

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