

Patent Title: Nutritional Supplements for Artificial Insect Diets

Docket Number: 18202  
Serial Number: 10721881



South Atlantic Area  
Gainesville, Florida

### Technology Description:

Agricultural Research Service (ARS) scientists have developed an insect egg protein supplement from Indian meal moth eggs, which can be used as an artificial diet additive to rear the insidious flower bug (*Orius insidiosus*). The insidious flower bug is a common predator of pest insects in sweet corn and field crops in eastern and central North America. This beneficial insect is used in commercial flower and vegetable green houses to control trips, spider mites, aphids, insect eggs, small caterpillars and other small insects. ARS's invention extends the lifecycle of females—critical for producing offspring and perpetuating the insect—and their ability to increase egg production. ARS's technology can be packaged in freeze-dried form.

ARS is currently looking for an industrial partner to assist in further developing this technology for use in artificial insect diets. The researchers have also developed a device that collects eggs for the insidious plant bug that can help in mass rearing this beneficial insect. Combining these two technologies could reduce production costs and increase the number of insects reared on this diet.

Commercial companies currently developing artificial insect diets should benefit from development and commercialization of this invention, particularly biological control companies that are already mass-producing this insect predator.

### Reference:

Please refer to patent application S.N. 10/721,881 (Docket #0182.02), "Fecundity-Promoting Factor for the Insidious Flower Bug Reared on Artificial Diet," which was filed on November 26, 2003. Foreign rights are available.

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