

Purification of Virus-like Particles
from a Hypovirulent Strain of
Endothia parasitica, EP-43

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Virus-like particles were purified from a hypovirulent strain of *Endothia parasitica*, EP-43. The method used is a modified version of Dodds' procedure; 50 to 100 grams of fungal mycelia are homogenized, subjected to polyethylene glycol precipitation, differential centrifugation, and sucrose density gradient centrifugation. One ml fractions were collected and read in a spectrophotometer at 254, 260, and 280 nm. Fractions with the highest optical density values were dialyzed against four changes of buffer. The dialyzate contained the purified virus-like particles. Steps used during the procedure to quantify the amount of dsRNA present included: STS-phenol extraction, ethanol precipitation, and Whatman CF-11 cellulose column chromatography. Purified virus-like particles were placed on carbon-coated grids, stained with phosphotungstic acid, and examined under the electron microscope.

The virus-like particles were found to be pleomorphic, but averaged 90 am in diameter. After treatment with chloroform, no virus-like particles were seen.