

### C. Virology--Biochemistry

Properties of dsRNA and Particulate.  
Components Associated with  
Hypovirulence

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Two distinct patterns of multiple double strand-RNA (dsRNA) components are now recognized; one typical of most European hypovirulent strains and the other typical of North American hypovirulent strains. The revised molecular weights of the prominent dsRNA's of both types are between 4.0 and 7.0 x 10<sup>6</sup>, unusually high for a fungal virus genome. The number and quantity of dsRNA components have been associated with levels of hypovirulence in isolates obtained from single conidia of a North American strain (EP-60). The quality of dsRNA varies unpredictably in the strain with the most complex dsRNA pattern (EP-113). The properties of nucleic acids and particulate components in extracts of *Endothia parasitica* before and after conversion by a hypovirulent strain (EP-113) have been compared. One result of infection is the presence of large amounts of two membranous fractions separable by density-gradient centrifugation and not present in the unconverted strain. Only one of these fractions has dsRNA associated with it; a fraction of this kind has been detected in several European hypovirulent strains. The particles in this fraction are club-shaped and do not resemble any well-characterized fungal virus.