Ribonucleic acids of viroids

Ryszard Wiaderkiewicz, Ryszard Oliński, Zofia Walter

Viroids are a new class of pathogenic agents which are isolated from infected plant tissue. They are RNAs of low molecular weight varying between 350 and 370 nucleotides in length. When introduced into healthy individuals of susceptible plants they are replicated autonomously despite of their small size and cause the characteristic disease. Unlike viral nucleic acids, viroids are not encapsidated. Known viroids are single stranded, covalently closed circular RNA molecules with extensive regions of intramolecular complementarity, they exist in their native state as highly base paired rods.