



Fig. 1. Rhabdovirus particle morphology and *Sonchus yellow net virus* genome map. (A) Electron micrograph of negatively stained particles of SYN. The negative stain reveals the surface structure of the particle on the left, and deeper penetration reveals the core of the particle on the right. Note the typical internal striated nucleocapsid core and the projecting spikes surrounding the membrane. (B) Model illustrating the components of rhabdovirus particles. The helical nucleocapsid core consists of the genomic RNA, the nucleocapsid (N) protein, the phosphoprotein (M2), and the L protein. A matrix protein (M1) is involved in attachment of the envelope to the nucleocapsid. This membrane consists of host lipids interspersed with an orderly array of glycoprotein (G) spikes. A sixth protein, sc4, is associated with the membrane, but its location or contribution to the particle morphology is not known. (C) Drawing illustrating the organization of the genes encoded by the 13,760-nucleotide genome of *Sonchus yellow net virus*. The genome order from the 3' to the 5' end of the (–)-strand RNA is presented from the left to right, according to convention. The genes consist of the leader sequence, the nucleocapsid (N) gene, the phosphoprotein (M2) gene, a gene encoding an envelope protein (sc4) of unknown function, the glycoprotein (G) gene, the polymerase protein (L) gene, and the trailer sequence. The relative size of each gene is proportional to the size of the viral RNA. A and B were adapted from refs. 2 and 10, respectively.

detail by Francki et al. (7). The concepts developed by the late Richard Francki, and his encouraging advice were also of enormous assistance during the development of the SYN procedure (8). Studies of the replication of SYN have also required development of several other techniques that may be applied directly to studies of virus replication, so we have included two additional procedures that we believe may have general applicability to studies of plant rhabdoviruses. These include techniques developed for isolation of polyribosomes