



Fig. 1. Model of a plant virus infection. The model shows different events in virus infection. Dashed lines indicate virus spread. Listed are events that could possibly be affected by accumulation of functional or nonfunctional CP in transgenic plants. *, evidence for interference has been found. ?, interference is likely, but has not yet been clearly shown.

phloem through sucking. Mechanical transmission can occur through direct contact of infected and noninfected plants or through tools or handling.

CPs of some plant viruses function not only in determination of the virion structure and protection of the viral genome. For example, alfalfa mosaic virus (AIMV) replication can only occur in the presence of CP (3). The CP molecules have a high affinity for viral RNA and bind to the genomic RNAs. It is also thought to be involved in regulating the balance between the synthesis of positive and negative RNA strands during replication (4). In viruses that move from cell-to-cell in the form of virions, CP is involved in local spread. Other viruses, such as TMV, can spread locally without CP, but require it for long distance transport through the phloem. In some cases, CP has been shown to