for which this is the case, belong to the α-like supergroup of RNA viruses. Viruses belonging to this supergroup express some of their genes via translational readthrough and by translation from subgenomic mRNAs ***(30)***. The viral RNA molecules are probably transported from cell to cell as RNA–MP complexes, through plasmodesmata, with altered size-exclusion limits ***(30)***. Another important supergroup of plant viruses is the Picorna-like supergroup. Members of this supergroup express their genes via proteolytic cleavage of precursor proteins ***(30)***. Cell-to-cell transport takes place as virus particles, via tubules through the plasmodesmata. These so-called desmotubules are most likely built up by viral MP ***(31)***.

It has been proposed that the transgenically produced CP inhibits the cotranslational disassembly of invading virus particles. This implies that CPMR should also have been reported for other than α-like viruses. This seems not to be the case. For this reason, it seems more likely that the transgenically produced CP mainly inhibits other and later steps in the viral infection process, such as RNA replication–transcription and/or viral cell-to-cell movement, as has been suggested by some authors ***(32)***. For the α-like viruses, CP is not required for cell-to-cell movement, which might be an indication that the presence of transgenically produced CP in plant cells interferes with replication–transcription of viral RNAs. In analogy to (–)-stranded viruses, it can be assumed that the amounts of CP present in the cytoplasm of plant cells infected with α-like viruses determine whether the viral RdRp is in the replicative or transcriptive mode. If this is indeed the case, then the presence of transgenically produced CP interferes with the replication-to-transcription switch, leading to abortive replication and virus resistance ***(33)***. On the other hand, it seems obvious that, for the Picorna-like viruses, which move from cell to cell as virus particles, the presence of relatively small amounts of transgenically produced CP does not have any effect on replication, viral cell-to-cell movement, and systemic spread.

4. RNA-Mediated Resistance to Plant Viruses

The first indications suggesting that other than protein-encoding sequences of viral origin were capable of conferring resistance came from experiments in which replicase or RNA-dependent RNA polymerase (RdRp) sequences of potato X potexvirus, tobacco mosaic tobamovirus, and pea early browning tobravirus were expressed in transgenic tobacco plants. The manifestation of the obtained resistance differed completely from that conferred by CP ***(6,7)***. Some, but not all, transformants showed extreme resistance to the homologous virus, and the levels of resistance were not correlated with the amounts of transgenically produced proteins or transcripts (*see* **Table 2**).