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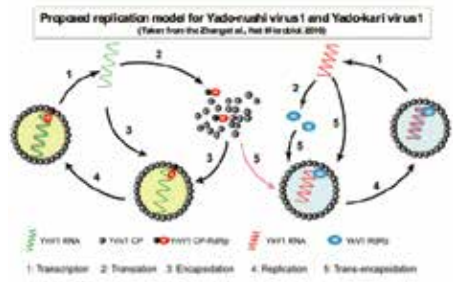


Study on the interaction among plant/fungus/virus toward virocontrol of phytopathogenic fungi

Using two combinations, Chestnut/chestnut blight fungus/mycoviruses and fruit trees/root rot fungi/mycoviruses, viral replication and symptom expression were investigated at the molecular and cellular levels. Obtained knowledge and achieved technical advance will be integrated into virocontrol (a form of biological control using viruses) of the plant pathogenic fungi.



Research on neo-lifestyle of fungal viruses



Several viruses, challenging the concept or rules of viruses, have been discovered from lower eukaryotes. The objective of this project is to reveal the unique neo-lifestyle of Yado-nushi virus 1 (YnV1) and Yado-nushi virus 1 (YnV1) newly discovered from an important pathogen of perennial fruit trees, *Rosellinia necatrix*. We show that YkV1 hijacks the capsid of YnV1 to heteroencapsidate YkV1 genomic RNA and replicate and use it as the replication site. Furthermore, viruses with similar mutualistic virus/virus interactions will be found in other eukaryotic organisms to show the generality of the neo-lifestyle.