

transmission rate of watermelon was 24 % from symptomatic watermelon collected from 5 regions of Gyeongnam provinces. Cucumber green mottle mosaic virus (CGMMV) was detected by DAS-ELISA with specific monoclonal antibody of CGMMV-HY1 periodically from root stock, during the sequential process for nursery seedling in Haman. Necrotic spots, at root stock seedling progressively revealed to typical symptomatology appeared on grafted nursery. It is noticeable that greenhouse watermelon cultivation was introduced for the first time to Bongwha region at high altitudes 600 m during the summer of 2000, where CGMMV disease was epidemic. Average of detection rate of CGMMV was about 92 % from symptomatic watermelon samples collected from 8 regions of Gyeongnam provinces. This is suggested that CGMMV was a dominant virus on watermelon, of which most dominant over 97% from Haman and Changwon. In greenhouse of Gyeongnam province, watermelon produces slight or severe leaf mottling, mosaic, dwarfing, deformed fruit and induced serious internal discoloration and decomposition of fruit flesh (Piduli) and decreased yield.

**C-30 *In situ* localization of P12 in rice dwarf phyto-reovirus infected plant.** Bong-Choon Lee, Yeon-Kyu Hong, Sung-Jun Hong and Sung-Tae Park National Yeongnam Agricultural Experiment Station, NICS, RDA. 1085, Milyang, Korea, 627-803

Rice dwarf phyto-reovirus (RDV), a member of the family *Reoviridae*, has a genome composed of 12 segmented dsRNAs designated as S1 to S12 with an increasing order of mobility in polyacrylamide gel electrophoresis (PAGE). In order to locate P12, ultrathin sections of RDV-infected rice plant were labelled by the anti-P12 polyclonal antibody and the protein A-gold complex. When thin sections from infected tissues were treated with a preimmune serum, nonspecific gold labelling was not observed, nor did labelling occurred in the absence of the primary antiserum from the standard incubation procedure. Gold particles were observed with P12 throughout the cytoplasm of infected leaves, although labelling was not uniform. Densely labelled areas frequently occurred in patches in the cytoplasm where slightly electron-dense. Sections from healthy tissues exhibited no significant labelling. Immunocytochemical studies showed P12 accumulated in the cytoplasm of infected cells.

**C-31 Emergence of *Rsv*-resistance breaking *Soybean mosaic virus* isolates from Korean soybean cultivars.** Bong Kum Choi<sup>1</sup>, Jung Mo Koo<sup>1</sup>, Hye Jin Ahn<sup>1</sup>, Hye Jung Yum<sup>1</sup>, Chang Won Choi<sup>1, 2</sup>, Ki Hyun Ryu<sup>3</sup>, P. Chen<sup>4</sup>, S.A. Tolin<sup>5</sup>.  
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