

purified with the 1/4 volume of phenol : chloroform : isoamylalcohol(25:24:1). dsRNAs from the aqueous phase was precipitated with isopropanol. This procedure was able to detect a minimal amount of dsRNA from CMV infected plant tissue and to distinguish different CMV satellite RNAs by polyacrylamide gel electrophoresis(PAGE). Moreover, this method can be applied CMV infected in pepper or *Rice dwarf virus* (RDV) infected rice.

**4-56. Identification of Chinese Yam Necrotic Mosaic Virus(ChYNMV) infecting Chinese yam(*Dioscorea opposita* Thunb. cv. Jang-Ma) in Korea.**

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Chinese yam(*D. opposita* Thunb. cv. Jang-Ma) plants showing necrotic mosaic symptom were collected from their growing fields in Andong, Korea. Electron microscopic examination of negatively stained preparations showed filamentous particles of 660nm in length. The viruses purified partially were used to isolate Viral RNA as template for RT-PCR to amplify the CP gene with ChYNMV specific and oligo dT primers. Amino acids sequeces revealed that the viruses shared 99.3% similarity with ChYNMV(AB044386) which was known as the member of macluravirus. So the viruses from Chinese yam(*D. opposita* Thunb. cv. Jang-Ma) plants were identified as ChYNMV. Comparing the amino aced sequences of ChYNMV strains with other macluraviruses such as CdMV, NLV and MacMV revealed that N-terminal was the most variable region and conserved regions were present within the genus Macluravirus.

**4-57. Mycological characteristics and Pathogenicity of *Mycosphaerlla brassicicola* isolated from the Imported Chinese cabbage.**

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One fungus was isolated from lesions on imported chinese cabbage leaves in process of quarantine inspection from China. The fungus was identified as *Mycosphaerlla brassicicola*, based on morphology of perithecia, asci, ascospore, and cultural characteristics. In Korea, this fungus has been quarantine fungus, and not yet report to occur. Perithecia of the fungus were globose, dark brown with apical papilate ostioles. The size was 90-100 x 130-135 $\mu$ m. Asci were bitunicate, 8-spored and 38-43 x 15-19 $\mu$ m. Ascospore were irregularly biseriate, hyaline, cylindrical, 2-celled, and rounded at the ends. Optium growth temperature of the fungus was at 20 $^{\circ}$ C on PDA but did rarely grow over 24 $^{\circ}$ C. Colony on PDA was of black aerial mycelia.