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The Identification of Three Different dsRNA Viruses in *Pleurotus ostreatus* Strains Cultivated in Korea.

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The presence of dsRNA viruses in Oyster mushroom has been a considerable problems in mushroom industry in Korea. In order to investigate the number of virus infected Oyster mushroom strains in Korea we analysed virus specific dsRNA among about 60 different strains cultivated in Korea. Double-stranded RNA(dsRNA) viruses were identified in three strains of *Pleurotus ostreatus*. Virus infected strains were Myoungwol, Shunnong and Chuak.

The dsRNA from Myoungwol was consisted of one large segment of 8kb and 3 smaller segments with 2,300, 2,000, 1,700bp in size. Isomeric virus particles of about 36nm in diameter from Myoungwol encapsidated 3 smaller dsRNAs segments. The dsRNA from Chuak was consisted of 3 smaller segment with 2,400, 1,800 and 1,600bp. The particles about 40nm in size from Chuak strain also encapsidated all 3 dsRNAs. The dsRNA from Shunnong was consisted of one large segment of 8kb and smaller segment 2.4kb in size. The particles about 33nm in size from Shunnong contained only one small dsRNA segment. There was no clear relationship between the presence of virus particles and the abnormal growth or the production of fruiting body in laboratory condition.

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A Small Polysaccharide Fraction from *Eclipta prostrata* Suppresses Death of the Mouse Spleen Cells in Vitro Involving the Up-regulation of the Macrophage Inflammatory Protein 1 Beta (MIP1- β) Gene

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Eclipta prostrata is an annual herb of the Compositae and grows abundantly in the tropical and sub-tropical parts of the world including most part of the Korean Peninsula. The dried plant was traditionally used for the treatment of liver diseases. A small polysaccharide fraction was purified from the plant and its effect on the mouse spleen cells in culture was examined, which indicated that the fraction suppressed apoptotic death of the spleen cells. A mouse gene array study and the RT-PCR analysis showed that the fraction might modulate the expression of macrophage inflammatory protein 1 beta (MIP1- β) gene, indicating that the fraction could be applied to the conditions including that of the HIV infection.