

Isolation and Characterization of Barley Yellow Mosaic Virus(BaYMV-IK) in Korea

Kui Jae Lee, Jong Chul Park¹⁾, Young Hoon Lee²⁾, Hyung-Moo Kim, Wang Hyu Lee

Faculty of Bioresource Science, Chonbuk National University, Jeonju 561-756, Korea

¹⁾National Honam Agricultural Experiment Station, Iksan 570-080, Korea

²⁾Rural Development Research Management, Bureau Research Planing Division,
Suwon 441-707, Korea

Barley yellow mosaic virus(BaYMV-IK) found in Iksan area was isolated, mechanically inoculated into barley cultivars, purified and antibody produced against BaYMV-IK. BaYMV-IK were purified from infected plants. It is a filamentous virus with 13nm in diameter and 240-320nm and 550-600nm in length. Specific antibody was produced by injecting the purified virus to a rabbit. Gel diffusion tests showed that antibody to BaYMV-IK did not make spur with two Japanese BaYMV strains, BaYMV-II-1 and BaYMV-III. BaYMV-IK showed the symptom of yellowing and necrosis in cv. Baedong. Mechanical inoculation tests proved difficult to other BaYMV strains. BaYMV-IK had two RNA, RNA 1(7.5kb) and RNA 2(3.5kb), and one coat protein(33KDa).