# **Reactions of Glycine Species to Diverse Isolates of Bean Pod Mottle Virus. (C08-chen202009-Oral)**

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### Abstract:

Bean pod mottle virus (BPMV) is widespread in many soybean-growing areas in the U.S. Four BPMV isolates (Ken I, Ken II, Ken I/II, Arkansas) were used in this research to study the effect of different BPMV isolates on a diverse collection of soybean. Ken I/II caused the most severe symptoms in most soybean varieties, and Ken I was the second most severe isolate. The Ken II and Arkansas isolates caused mild symptoms in soybean. Infection with the four BPMV isolates decreased plant height, fresh weight, and dry weight. BPMV concentrations in the infected plants were determined by enzymelinked immunosorbent assay (ELISA). There are evidently varietal differences in symptom severity and virus concentration. However, BPMV titer was not consistently correlated with symptom severity. Resistance genes for soybean mosaic virus (SMV) did not provide resistance to BPMV. No immune varieties were found, but some varieties appeared to be tolerant to BPMV infection.

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