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Identification of Soybean Genotypes for Resistance to *Phytophthora sojae* from Korean *Glycine max* Core Collection

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[Introduction]
Phytophthora root and stem rot (PRR), caused by the soil-borne oomycete pathogen *Phytophthora sojae*, is one of the most destructive diseases of soybean. The disease can occur more severely in saturated soil such as paddy soil. Occurrence of *P. sojae* and its interaction with soybean were reported in many countries, but little was known in Korea. Presence or absence of resistance to *P. sojae* in domestic soybean cultivars and germplasms remains largely unknown. This study was conducted to discover soybean genotypes resistant to *P. sojae* from Korean *G. max* Core Collection.

[Materials and Methods]
Fifteen to twenty 7-day-old seedlings per genotype were inoculated on the hypocotyl by syringe with mycelial slurry of a *P. sojae* isolate. Genotypes were evaluated for resistant (hypersensitive) and susceptible reactions 7 days after inoculation.

[Results and Discussion]
Of the 126, approximately 10% of the tested genotypes showed resistance reaction to the *P. sojae* isolate, while 40% and 50% genotypes were susceptible and intermediate, respectively. The genotypes with intermediate reaction will be tested to confirm their reaction again. The rest of the genotypes in the core collection will be evaluated for future.

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