

RESEARCH ARTICLE

Studies on seed quality characters in green gram cv. KM2

■ A. Kamaraj and S. Padmavathi

SUMMARY

Green gram is one of the major pulse crops, mainly cultivated as a rainfed crop under rice fallow condition. The low productivity under rainfed condition is due to soil moisture deficit, uneven rainfall, low soil fertility and poor crop management. To overcome this problem, seed hardening techniques is recommended to alleviate the moisture stress condition. The present study was emphasized on the effect of seed hardening using various leaf extract like *Prosopis*, *Pungam*, *Nochi*, *Neem*, *Umathai*, *Aduthoda*, *Nerium*, papaya, bittergourd etc. on seed and seedling characteristics like germination per cent, speed of germination, accumulated speed of germination, mean daily germination, root length, shoot length, seedling length, dry matter production, seedling vigour-I and seedling vigour-II of green gram KM2. The results revealed that green gram seeds hardened with 1 per cent *Prosopis* leaf extract for 3 hours @ 1/3rd volume of solution enhanced the seed and seedling quality characteristics. under adverse environment conditions.

Key Words : Greengram, Leaf extract, Seed hardening, Seed quality, *Prosopis*, *Pungam*

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