Studies on Impact of Kinetin and Nitrogenous Compounds on Delaying of Nodule Senescence in Blackgram (*Vigna mungo* (L.) Hepper).

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ABSTRACT

A field experiment was carried out to assess the impact of kinetin and nitrogenous compounds on delaying of nodule senescence in blackgram at Agricultural College, Bapatla during *kharif*, 2018. Treatments consisting of three different concentrations of kinetin (10^{-2}, 10^{-3} and 10^{-4} M), potassium nitrate (5 and 10 g L^{-1}) and urea (10 and 20 g L^{-1}) along with untreated control and water application were imposed as foliar treatments on blackgram *cv* PU-31 in a randomized block design, replicated thrice. Treatments were imposed at three different times of reproductive growth *viz*., 10 days before 50% flowering, 50% flowering and 10 days after 50% flowering in blackgram. Results revealed that foliar application of kinetin at lower concentration (10^{-4} M) and higher concentrations of nitrogen sources *i.e.*, potassium nitrate (1%) and urea (2%) decreased the nodule senescence most effectively in blackgram.

Keywords: *Blackgram, kinetin, nodule senescence, potassium nitrate, and urea.*