## Effect of different pre-sowing treatments on seed germination of *Andrographis paniculata* (Burm F.) Wall ex. Nees.

## **Rajnish Kumar and Malvika Srivastava**

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**ABSTRACT :** Andrographis paniculata is an important medicinal plant of family Acanthaceae commonly known as "King of Bitter's". The plant is used as a remedy against various incurable diseases like AIDS, Cancer, Diabetes, Jaundice etc. Andrographis is a good source of secondary metabolites of which Andrographolide is very important and used in the preparation of many medicines and has great importance in pharmacognosy. The propagation of this plant is mainly done by seeds. The seeds of Andrographis paniculata are dormant and have problem in germination. The aim of this study was to overcome the problem of propagation by enhancing the germination rate. For this purpose, seeds were treated with 150 mM KNO<sub>3</sub> for 15 min; 0.5% NaCl for 20 min; conc.  $H_2SO_4$  for 2 min. and 80°C hot water for 2.0 min. Thereafter, seeds were transferred to Petri-plates containing Whatman filter paper. Seeds were allowed to germinate in Growth Chamber under controlled and aseptic conditions. 7<sup>th</sup>, 9<sup>th</sup> and 11<sup>th</sup> Day After Treatment it was observed that maximum germination percentage, radicle and plumule length, seed vigor index and tissue water content was obtained in set of seeds treated with 80°C hot water.

Key Words : Kalmegh, *Andrographis paniculata*, seed dormancy, hot water treatment, germination percentage, seed vigor index (SVI), tissue water content (TWC).