

Remyelinating Potential of Bacopamonnieri in Experimentally Induced Demyelinating Neuropathy in Rat

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Abstract—Bacopamonnieri has been used for centuries in Ayurvedic medicine, either alone or in combination with other herbs, as a memory and learning enhancer, sedative, and anti-epileptic and as neurotonic. The present study was planned with the aims to evaluate the remyelinating potential of Bacopamonnieri in experimentally induced demyelinating neuropathy in rat model. The study was conducted at Experimental Animal House, Division of Medicine, ICAR-Indian Veterinary Research Institute, (IVRI) Izatnagar, Bareilly, Uttar Pradesh for the period of seven weeks (49 days). Wistar albino rats (IVRI, 2CQ) aged 21 days weights between 40-50 gm were used in the study. Result of the study showed significant ($P < 0.05$) increase in the plasma level of Myelin Basic Protein (MBP) and activity of Neuron specific enolase (NSE), in all demyelinating induced group compared to untreated healthy control group. On the other hand, significant ($P < 0.05$) decrease in the level of MBP and activity of NSE 28 days post treatment in group treated with Bacopamonnieri when compared with positive control group indicate that Bacopamonnieri have ameliorative effect in experimentally induced demyelinating neuropathy.