

# National symposium on

"Promotion & development of Indian Medicinal Plants"

Special reference- Brahmi (Bacopa monnieri)

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### SFE-CONV-1873

## Brento Forte: A potential cognition enhancer in electroconvulsive shockinduced retrograde amnesia in rat

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Bacopa monnieri is a popular herb being used for management of cognitive dysfunctions. Brento Forte Tablet contains Bacopa monnieri as one of its major ingredients along with other well-known Medhya Rasayna herbs. These herbs are mentioned in Ayurveda and are being used since ages in conditions such as cognitive dysfunction, mental debility, and lack of concentration. The aim of the study was to investigate the effect of Brento Forte on Electroconvulsive therapy (ECT)-induced amnesia in rats. The cognitive-enhancing effect was studied by acetylcholinesterase inhibition assay. he ECT-study was conducted on male, Wistar rats. The study was run in three 15-day cycles with 16 animal studied in each cycle. The dose of Brento Forte (36 mg/kg/day) and vehicle (control group) were administered orally daily 2 hours before the ECT-study. Acetylcholinesterase inhibition potential was evaluated by microplate based in-vitro assay. Brento Forte treated group showed an improvement in memory (adequate learning 96% and perfect learning 58%) as compared to the vehicle treated group in ECT study. This formulation significantly protected (p<0.5) against ECT-induced retrograde amnesia and effect was consistent and prolonged. Brento Forte showed potent acetylcholinesterase inhibition potential with an IC50 value was 36.01 µg/ml. Brento Forte protects against ECT-induced retrograde amnesia and inhibits acetylcholinesterase activity thereby suggesting its role as a potential alternative in management of impaired learning and memory.

#### SFE-CONV-1874

#### Medicinal Plants citing beledona, Ada and Rasun

Prabhat Kumar Ray, Puja Patra

P.K.College, Contai, Purba Medinipur

Medicinal plants, also called medicinal herbs, have been discovered and used in traditional medicine practices since prehistoric times. Plants synthesise hundreds of chemical compounds for functions including defence against insects, fungi, diseases, and herbivorous mammals. Numerous phytochemicals with potential or established biological activity have been identified. Phytochemistry is the study of phytochemicals, which are chemicals derived from plants. Those studying phytochemistry strive to describe the structures of the large number of secondary metabolic compounds found in plants, the functions of these compounds in human and plant biology, and the biosynthesis of these compounds. Plants synthesize phytochemicals for many the

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