Clerodendrum capitatum in treating brain disorder

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Clerodendrum capitatum is used in traditional medicine in Cameroon to treat brain diseases like headaches, epilepsy and memory disorders. The pharmacological properties of this plant were studied in animal memory models (the open field test, the novel object recognition test and the T maze test). The phytochemical characterization showed that the decoction of Clerodendrum capitatum contains alkaloid, tannins, saponins, triterpenes, and anthraquinon. In open field test, Clerodendrum capitatum increased crossing and center time even in mice treated with scopolamine. In the presence of Clerodendrum capitatum, the latency time for the novel object was decreased by 33.3% while the one of the familiar object was increased. Controversially, the exploratory time for the novel object was more increased when compared to the familiar object (315.9% and 28.6% respectively), and the recognition increased from 47.3% in the control group to 76.9% in mice treated with the decoction at the dose of 139.1 mg/kg. In retention phase in T maze, the increase of the number of entries and the time spend in arms induced by the Clerodendrum capitatum was greater in the preferred arm than in the other arm even in the presence of scopolamine. The plant also decreased latency time of choosing an arm in retention. The results were compared to piracetam. In addition, Clerodendrum capitatum decreased the acetyl cholinesterase activity even in mice treated with scopolamine. Clerodendrum capitatum could be very helpful in traditional medicine to enhance memory, and may contain potential compounds efficient in the treatment of memory loss.

Biography
Ngo Bum Elisabeth has completed her Ph.D. at the University of Ngaoundere and postdoctoral studies at Sandoz Research Institute in Bern, Novartis in Basel and the pathopharmakologische Institute in Bern. She is Vice Dean in Charge of Academic Affairs at the University of Ngaoundere, leading project on medicinal plants. She published more than 30 papers in reputed journals.

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