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## *In vitro* vasorelaxant effect of Artemisia herba Alba association in spontaneously hypertensive rats

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The present study aims to evaluate the *in vitro* vasorelaxant effect of Artemisia herba alba Asso. (Ah) aqueous extract. Aortic rings were isolated from spontaneously hypertensive rats and incubated in aqueous Ah extract at the following doses: 3, 5, 10 and 20 mg/ml. Incubation of aqueous Ah extract for 30 minutes produced a significant shift of the dose response curve to Norepinephrine (NE) (10<sup>-8</sup> to 10<sup>-5</sup> M) (p<0.001). No change in the maximal response to Ah was observed after the incubation of the three used doses of aqueous Ah extract (p>0.05). Endothelium ablation significantly reduced the vasorelaxant effect of aqueous Ah extract (p<0.001). In addition, inhibition of vascular nitric oxide by N $\omega$ -Nitro-L-Arginine Methyl (LNAME) produced a significant reduction in the vasorelaxant effect of aqueous Ah extract (p<0.001). However, cyclooxygenase inhibition by indomethacin did not affect the vasorelaxant effect of aqueous Ah extract. In order to evaluate the *in vitro* cytotoxic effect of the three used doses of Ah, we have measured the levels of MTT (3-[4, 5-dimethylthiazol-2-yl]-2, 5-diphenyl tetrazolium bromide) and LDH (Lactate dehydrogenase) in cultured vascular smooth muscle cells (SMCs). No change in the LDH and MTT levels was reported after incubation of SMCs with aqueous Ah extract when compared to control values. We conclude that aqueous Ah extract at a dose of 20 mg/ml possess an *in vitro* vasorelaxant effect. The underlying effect seems to be dependent of the endothelium vasorelaxant factors which may involve nitric oxide synthesis.

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## Traditional healthcare information of Adansonia digitata L. (Baobab) in central part of India

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The tree is named as “the small pharmacy or chemist tree” for the reason that all parts like the leaves, bark, fruits and seeds are used as food and medicines in India. Adansonia digitata L. (Malvaceae) is commonly known as baobab tree native to Africa. Baobab is a multi-purpose tree which offers protection and provides food, clothing and medicine as well as raw material for many useful items. The fruit pulp, seeds, leaves, flowers, roots, and bark of baobab are edible and they have been studied by scientists for their useful properties. The fruit pulp have very high vitamin C (280–300 mg/100g), calcium (293.0 mg/100g), phosphorus (96.00-118.00 mg/100g), carbohydrates (75.60 mg/100g), fibers (52 mg/100g), potassium (2.31 mg/100g), proteins (2.30 mg/100g) and lipids content (0.27 mg/100g), which can be used in seasoning as an appetizer and also make juices. Seeds contain appreciable quantities of phosphorus (6140.0  $\mu$ g/g dry weight), magnesium (3520.0 $\mu$ g/g dry weights), zinc (25.7 $\mu$ g/g dry weight), sodium (19.6 $\mu$ g/g dry weight), iron (18.3 $\mu$ g/g dry weight), Manganese (18.3 $\mu$ g/g dry weight) whereas they have high levels of lysine, thiamine, calcium and iron. The various parts of the plant (leaves, bark and seeds) are used as a panacea, that is, to treat almost any disease and specific documented uses include the treatment of malaria, tuberculosis, fever, microbial infections, diarrhea, anemia, dysentery, toothache. Phytochemical investigation revealed the presence of flavonoids, phytosterols, amino acids, fatty acids, vitamins and minerals. The first record on Baobab is in Orchha, Region of Bundelkhand, Madhya Pradesh, India. The paper summarizes the information on various aspects of traditional information, taxonomic description, medicinal properties and importantly nutritional value.

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