

## The effect of *Brillantesia vogeliana* (Nees) Benth (Acanthaceae) on obesity and lipid profile

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### Abstract

Obesity is a public health problem in developing countries. In fact the diet consumed is very rich in carbohydrates, fats and poor in proteins. Sometimes people use drugs to reduce the intake of food and lose weight. In Cameroonian pharmacopeia *Brillantesia vogeliana* (*B.v*) is used to treat infertility and many other diseases. During treatment, it is noticed that people lose weight. We carried out this study on obese women and on wistar rats to demonstrate and understand the effect of this medicinal plant on weight loss as well as on antropometric and lipid parameters. Seven women were given twice a day, infusion made from 2g of dried leaves of *B.v*. kept for 15 minutes in 200 ml of hot water. No restriction of diet was done. After eight weeks, weight, BMI, antropometric parameters, lipids profile, anti atherogenic index, creatinine, transaminases were measured. Body weight, BMI and athropometric parameters decreased. Triglycerides, LDL Cholesterol levels decreased while anti atherogenic index increased. There were no renal and liver toxicity as serum creatinine and transaminases levels did not change. Wistar rats were given some extract of this plant. Histopathological studies done on the biopsies of their kidney, liver and heart showed no toxicity. Significant decrease on the levels of triglycerides and the cholesterol were observed. The increase of lipase activity and the inhibition of that of HMG CoA Reductase could explain these modifications. We therefore conclude that *B. vogeliana* can be used by obese people to improve their cardiovascular status.

### Biography

**Jeanne Ngogang** has completed her PhD from François Rabelais University in Tours, France. She is the Head of the Departement of Biochemistry at the Faculty of Medicine and Biomedical Sciences (University of Yaounde 1) and the Chief of Service of Biochemistry at the University Center Hospital in Yaounde, Cameroon. She has published more than 40 papers in reputed journals. The main topic studied being the valorization of medicinal plant.