Study of repellent effect of essential oil extract from the leaves of *Artemisia annua* cultivated in Cameroon and in Luxemburg

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**Introduction:** Artemisia annua is an annual plant from Chinis origin well known for its medicinal value due to its diverse chemical composition in 2010. CHOUGOUO showed that A. annua cultivated in Cameroon is rich in essential oil and in 2012; DOMUM demonstrated the larvicidal antibacterial and antifungal properties of A. annua of Cameroon. In the continuation of these works, we want to investigate the repulsive effect which could be used in malaria prevention.

**Materials and methods:** The essential oil of Artemisia annua of Cameroon and that of Luxemburg were obtained by hydrodistillation of dry leaves of Artemisia annua from the two countries. In order to determine their repulsive activities, two methods were used.

All our methods were validated and the results analyzed using Microsoft Office Excel.

**Results and discussion:** The turnover of the extraction of the two essential oils gave 0.16%. The repulsive activity was evaluated at the concentration of 0, 50, 100, 200, 300 and 400 part per million (ppm). After the application of the two types of oil by the two methods, we observed that the two plants are very repulsive as from 50 ppm up to 400 ppm. The time of protection is in an average of 3 hours, but this reduces as the essential oil is diluted.

**Conclusion:** Essential oil extract from the leaves of Artemisia annua cultivated in Cameroon and in Luxemburg have similar repulsive properties on adult Anopheles gambiae.

**Biography**

Chougouo Kengne R.D has completed her PhD; she is a Pharmacist Officer and Researcher (CER) at the University Mountain Cameroon. She has published more than 20 papers in reputed journals.

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