Ethnobotanical survey on insecticidal and repellent plants in the Republic of Congo

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ABSTRACT

Objective: The study aimed to collect data about natural products that are traditionally used for controlling insects that are harmful to human health.

Methodology and results: Investigation was undertaken in the departments of Sangha, in the North (Lékoumou, Niari) and Kouilou in the South of the Republic of Congo, using a questionnaire. Informants were asked to provide information about plant materials used to prevent insect responsible for nuisance and transmission of disease to humans and pets. Results showed that the respondents knew plants with anti-mosquitoes (62.5%), anti-lice (76.1%), anti-tungiasis (70.4%) anti-chicken fleas (61.4%) and anti-dog fleas (45.4%) properties. The respondents cited some species that were identified either in the field or in the national herbarium, making a total of 34 plants identified. The plants cited appear in two groups: repellent and toxic. The first group includes plants such as *Elaeis guineensis, Lantana camara*, *Ocimum gratissimum* and *Cymbopogan citratus*, which repel mosquitoes, dog fleas and chicken fleas, and, the second includes *Mucuna sloanei, Piptadeniastrum africanum, Strychnos icaja, Croton mayumbensis* and *Nicotiana tabacum* that kill *tungiasis* and head lice*. The part of plants along with their specific usage has been described.

Conclusion: Botanical materials are still widely used in Congo to repel and control insects. This study provides information that can be used in the discovery and development of new, more affordable and safer products to control harmful insects.

Key words: plants, insect, repellent, vector, Congo