

## Oral presentation

### Anti-malarial plants and patterns of their usage around Kakum National Park in Ghana

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**Introduction.** Malaria is one of the most important diseases, especially in Africa, besides HIV-AIDS and tuberculosis. The disease continues to be a health problem worldwide and a challenge to human development (Asenso-Okyere et al, 2003). It is estimated that malaria is implicated in the deaths of between 1.4 and 2.6 million people annually (WHO, 1996). About a million of these deaths occur in children below the age of five years. Children and pregnant women are known to suffer the severest form of the disease. In spite of control programs in many countries there has been very little improvement in the control of malaria due to drug resistance. Drugs for the treatment of malaria are also often more expensive and inaccessible as compared to traditional medicine. Many species of plant have been reported to be used in different parts of the world for the treatment of malaria. In Ghana, several species of plant have been reported to be used to treat the disease (Abbiw, 1990; PORSPI, 1992; Irvine, 1961; Mshana et al, 2000; Dokosi, 1998; Ayitey-Smith, 1989; Asase et al, 2005). However, it is known that the list of species of plants used by indigenous communities for the treatment of malaria in Ghana is still not yet exhaustive (Asase et al, 2005). Also, quantitative information on the pattern of anti-malarial plants usage in Ghana has been lacking.

**Objectives.** The present study was therefore conducted to identify the species of plants used for the treatment of malaria by the communities living around the Kakum National Park as well as to evaluate the patterns of usage of the plants by the communities for their treatment of malaria.

**Methods.** The information on species of plants used for the treatment of malaria was obtained by interviewing seven reputed herbalists from the three communities, namely, Abrafo, Mfuom and Jukwa living around the Kakum National Park. Semi-structured interview technique similar that described by Martin (1995) was used to interview separately the seven herbalists. Voucher specimens of each species of plant identified were collected and deposited at the Ghana Herbarium, Department of Botany at the University of Ghana, Legon. In order to evaluate the patterns of usage of the anti-malarial plants identified, 150 people from the communities were randomly selected and interviewed using a questionnaire. Each subject interviewed was asked to provide the following information for the questionnaire: age, sex, ethnic group, educational background, choice of treatment for malaria and reasons for choice.

**Results.** A total of 30 species in 28 genera belonging to were reported to be used by herbalists in treatment of malaria by communities surrounding the Kakum National Park. Trees were more dominant and constituted about 46% of the total species of plants that were reported to be used in the treatment of malaria in the study area. The species of plants were reported used for 16 herbal preparations as some of the preparations included the use of more than one species. Many of the people in living around the park used medicinal plants for the treatment of malaria compared to western style medicine.

**Conclusion.** The study has shown that the species of plants used by the communities living around the Kakum National Park for their treatment of malaria were derived from different plant families and has also indicated that many of the people in th area used medicine plants for their treatment of the disease.

Keywords: Anti-malarial plants; Kakum National Park; Ghana

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