

Artemisia annua: a plant with antiplasmodial activity for local production in the tropics?

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Artemisia annua L. is one of the oldest well documented medicinal plants and is listed in the *Chinese pharmacopoeia* as a remedy against malaria (1).

Artemisinin, extracted from *Artemisia annua*, is a well established compound in the treatment of malaria (2). However, very few data are available about the efficacy of the traditional tea preparation of *Artemisiae annuae herba* so far.

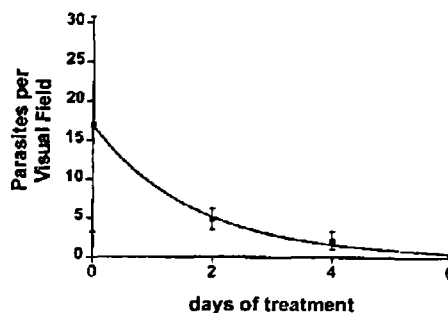
In the current investigation, *Artemisia annua* L. was successfully cultivated in Central Africa. The leaves of this plant contained 0.63 – 0.70% artemisinin, as determined by HPLC (3), and 40% of this artemisinin could be extracted by simple extraction using infusion with boiling water.

With permission of the local health authorities and with informed consent of the patients, two pilot studies were carried out in order to observe the clinical antiplasmodial efficacy of these preparations. Doses (5 g dried leaves per day) were corresponding to the recommendations of the *Chinese Pharmacopoeia*. In the first trial 25 semi-immune patients with parasitaemia and symptoms typical for malaria showed a rapid decrease of the parasite density on day 2 and 4 of the treatment. On day 6, thick blood films of 21 of the 25 patients (84%) were negative.

In another trial 44 of 48 patients (92%) were free of parasites in the thick blood films after a five days' course with the tea preparation. This was accompanied by a significant improvement of the subjective symptoms in 37 patients (77%). No severe side-effects were seen. In our opinion, these results justify further examinations of the antiplasmodial potential of *Artemisiae annuae herba* preparations. Further studies would need to put special emphasis on the observation of possible recrudescence after initial improvement.

References

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* shown are means and 95 % Confidence Intervals

Reduction of parasite density in thick blood films of 25 patients with malaria *

