

eventually may produce blindness. The clinical examination of a patient with onchocerciasis should be quite strict in both the history taking and in the physical examination itself, and specially in the latter. The detection of tumors is very important as they are the cause of the ocular and skin lesions and probably of some epileptiform fits observed in the endemic zones. Therefore, it is necessary to discover all tumors and look carefully for the small ones that frequently are difficult to recognize. The clinical examination may be divided into three steps: (1) History taking: (a) Name, age, sex, race, birthplace, occupation, etc.; (b) Pathological and hereditary antecedents: alcoholic, syphilis, epilepsy, intestinal parasites; (c) Habits, life, work, time spent in the endemic region; (d) History of present condition: tumors (number, size, location), skin lesions (color, aspect, location, extension, swelling), ocular lesions (light sensitiveness, spasm of eyelids, punctate keratitis and visual acuteness); epilepsy (antecedents and whether the symptoms appeared before or after the onchocerciasis itself). (2) Physical examination to detect the tumors. (3) Eye examination. (4) Laboratory investigations: microfilariae in the skin, eosinophils in the blood, etc. In conclusion, three main examinations appear to be necessary in an onchocerciasis patient: clinical, ophthalmological and laboratory. In persons apparently negative the first time, at least two or three more examinations should be performed at one or two months intervals.

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## CULICOIDES DIABOLICUS EN MÉXICO: CARACTERES DEL MACHO

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### RESUMEN

El autor presenta datos indicativos de que el *Culicoides filariferus* Hoffman, 1939, es idéntico al de *Culicoides diabolicus* Hoffman, 1925. Esta especie es muy parecida a *C. guttatus* (Coquillet, 1904) pero según da Costa Lima (1937) las dimensiones del ala parece que las separan. Describense en este trabajo los caracteres de la terminalia masculina y femenina. *C. diabolicus* es interesante porque en él se han encontrado formas en desarrollo de una filaria.

### SUMMARY

The A. offers evidence to the effect that *Culicoides filariferus* Hoffman, 1939, is synonym with *Culicoides diabolicus* Hoffman, 1925. This species is related to *C. guttatus* (Coquillet, 1904) but according to da Costa Lima (1937) the wing size apparently differentiates them. The characters of the male and female terminalia are described. *C. diabolicus* has been found infected with a filaria.

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