FURTHER OBSERVATIONS ON HYPERENDEMIC ONCHOCERCIASIS IN THE UPPER TARABA RIVER VALLEY, NIGERIA

AKOGUN O. B.* & RENZ A.**

Keywords: Onchocerca volvulus, blinding onchocerciasis, Taraba river valley, Nigeria.

Following an earlier report of severe ocular onchocerciasis in the middle Taraba river valley, Nigeria (Akogun 1992) and the need to identify all communities which may benefit from ivermectin treatment, an epidemiological survey of the less easily accessible communities of the upper Taraba river valley was carried out.

Of the 2,176 people from 12 communities that were examined for the presence of the microfilariae of Onchocerca volvulus and the clinical symptoms of onchocerciasis, 61.8% were microfilarial positive and the intensity of infection was 78.9 microfilariae/skin-snip. Infection rates exceeded 60% in nine communities (with 100% in one community and 98.5% in another). Two communities had 45.4% and 32.2% while the remaining community had 9.1%. As the rate and intensity of infection increases so does the prevalence of leopard skin and nodule carriage.

Eye lesions and blindness were broadly defined as any visible circular or localised corneal 'snowflakes' or occlusion of the pupil and inability to read the 6/60 'E' card at 3 m respectively. Eye lesions were especially high (27.1%) and reached 56.7% in one community. In six communities the proportion of the population with eye lesions exceeded 30%. Blindness as recorded in all but one community and its prevalence ranged between 3.2% and 62.5% with an overall average of 19.7%. Eye lesions were rare before the age of 20 years but blindness increased from 17.4% in age 20 - 29 years to 54.6% at age 50 years (N = 972). These surveys indicate that the upper Taraba valley is worse than the mid-valley area and that the Taraba has the worst blinding onchocerciasis in Nigeria.

The transmission of O. volvulus at three sites of the Taraba valley is currently been assessed.

* Federal University of Technology, Department of Biological Sciences, Yola, Nigeria
**Universität Hohenheim, Fachgebiet Parasitologie (Institut für Zoologie), 70599 Stuttgart, Germany