

Epidemiology of the epizootic ulcerative syndrome occurring for the first time among fish in Sri Lanka

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Summary

Fish suffering from epizootic ulcerative syndrome were observed for the first time in Sri Lanka in late 1987. The disease caused heavy mortalities among freshwater and estuarine fish in the South Western Zone. *Ophicephalus* spp. were found to be the most affected of the species of fish. Although the primary cause of the disease is unknown, *Aeromonas hydrophila* and an unidentified rhabdovirus have been associated with similar losses in fish throughout the region.

Zusammenfassung

Das erste Auftreten des epizootischen ulcerativen Syndroms bei Fischen in Sri Lanka und seine Epidemiologie

Ende 1987 wurden in Sri Lanka erstmals Fische beobachtet, die am epizootischen ulcerativen Syndrom erkrankt waren. Die Krankheit führte zu einer hohen Mortalität der Fische im Süßwasser und in den Ästuarien im Südwesten. *Ophicephalus* spp. war am stärksten betroffen. Die primäre Ursache der Krankheit ist unbekannt. Allerdings traten *Aeromonas hydrophila* und ein nicht identifizierter Rhabdovirus bei vergleichbaren Fischverlusten in der ganzen Region auf.

Résumé

Epidémiologie du syndrome ulcératif épizootique apparaissant pour la première fois parmi des poissons à Sri Lanka

Fin 1987 on a observé pour la première fois à Sri Lanka des poissons souffrant d'un syndrome ulcératif épizootique. La maladie a causé une haute mortalité parmi les poissons d'eau douce et d'estuaires dans la zone sud-ouest. Il a été constaté que *Ophicephalus* spp était l'espèce la plus touchée. Bien que la cause primaire de la maladie ne soit pas connue, *Aeromonas hydrophila* et un rhabdovirus non identifié ont été associés à des pertes semblables en poissons dans toute la région.

Epizootic outbreaks of ulcerative disease among fish have been recently reported from Australia and South East Asia. The disease is characterized by the appearance of large haemorrhagic or necrotic ulcerative lesions on the body surface resulting in extremely high mortality among groups of affected fish.

MACKENZIE and HALL (1976) described an ulcerative condition known as "red spot" in estuarine and freshwater species from Australia. Mortalities among cyprinids and other cultured fish due to ulcerative lesions have also been described from Indonesia, Malaysia and Papua New Guinea (ROBERTS et al. 1986). In recent years, epizootic outbreaks causing devastating effects on the fishing industry have occurred in Burma (BOONYARATPALIN 1985), Laos (ROBERTS et al. 1986) and Thailand (TONGUTHAI 1985). The loss to the Thailand fishery in 1982-83 was estimated to be around 9 million US Dollars (TONGUTHAI 1985).

Fish with large necrotic ulcerative lesions were observed by the authors for the first time in Sri Lanka in late November, 1987 in a small stream associated with paddy fields about 15 km northeast of Colombo (Fig. 1). The disease spread very rapidly causing large mortalities among freshwater and estuarine fish. A survey was immediately initiated to determine the