

À25 ARBOVIRUSES IN SRI LANKA III; TICK BORNE ARBOVIRUSES

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Seroepidemiological surveys by Plaque Reduction Neutralization Test (PRNT) and HI showed significant prevalence of antibodies to Bhanjavirus in the Kotukachchiya and Kandy areas. (Table 1). The highest prevalence of Bhanja virus activity was documented in Goats and Sheep at Kotukachchiya. No antibodies were detected in

human sera in any of the areas tested, even the animal handlers at Kotukachchiya being seronegative.

20 pools (10-15 ticks each) of *Haemaphysalis intermedia* ticks collected off healthy animals were processed for virus isolation by inoculating into new born mice. Four viruses (T4;TK257;TK258 and TK260) were isolated but tests with Bhanja antiserum showed these isolates were not Bhanja virus. These isolates are presently being identified. Preliminary data, suggest that farm workers in Kotukachchiya have serum antibodies to the isolates suggesting that these tick borne viruses do cause human infection.

Thus the existence of at least two tick-borne arboviruses - one Bhanja and another not yet identified, is documented serologically and by virus isolation respectively.

The documentation of Bhanjavirus activity in Sri Lanka confirms preliminary results by Bardos *et al*¹ Bhanja has been reported to cause human febrile disease² and has been suggested to be a cause of lumbar paralysis in goats³, though the latter association remains unproven.

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References

1. Bardos *et al* (1983) *Bull.WHO.* 61, 987-990
2. Calisher & Goodpasture (1975) *Am.J.Trop.Med.Hyg.* 24, 1040-1042
3. Shah & Work (1969) *Indian J.Med.Res.* 57, 793-798

Table 1. Neutralizing (PRNT) Antibodies to Bhanja Virus

Species	Area	No.tested/No.positive
Cattle	Kandy	9/91
Goats	Kotukachchiya	11/24
Sheep	Kotukachchiya	13/16
Cattle	Nikawaratiya	0/25