

transported to the laboratory, processed and identified based on morphological characters illustrated by Sen & Fletcher (1962).

Based on morphological features, ticks were identified as *Amblyomma* sp., which is in consonance with the findings of BurrIDGE *et al.* (2000) who evidenced *Amblyomma* ticks in snakes from Florida, additionally, the same species of tick, was evidenced in tortoises and monitor lizards. Hanson *et al.* (2007) observed snake paralysis in Southern Black Racer due to the bites of *Amblyomma rotundatum* from Florida. Tick infestation in snakes was also recorded by Sur *et al.* (2001) from West Bengal, India. They successfully treated tick infested snakes with deltamethrin. The snakes were found tick free and resumed to eat normally within a week after acaricidal therapy. Kiel *et al.* (2006) reported deaths in African vipers imported from Africa to Florida due to vomiting, diarrhoea, emaciation, convulsions, which were controlled only after elimination of ticks.

#### References

- BurrIDGE M.J., L.A. Simmons & S.A. Allan (2000). Introduction of potential heartwater vectors and other exotic ticks into Florida on imported reptiles. *Journal of Parasitology* 86(4): 700-704.
- Hanson B.A., P.A. Frank, J.W. Mertins & J.L. Corn (2007). Tick paralysis of a snake caused by *Amblyomma rotundatum* (Acari: Ixodidae). *Journal of Medical Entomology* 44(1): 155-157.
- Kiel, J., R.M. Alarcon, J.E. Parker, J. Vivekananda, Y.B. Gonzalez, L.J.V. Stribling & C.J. Andrews (2006). Emerging tick-borne disease in African vipers caused by a cowdria-like organism. *Annals of the New York Academy of Sciences* 1081(1): 434-442.
- Sen, S.K. & B. Fletcher (1962). *Veterinary Entomology and Acarology for India*. 1<sup>st</sup> edition. ICAR, New Delhi.
- Sur S.K., G.L. Ghosh & D. Chatterjee (2001). Use of deltamethrin on tick infested snakes. *Zoos' Print Journal* 16(1): 410.

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VET BRIEF

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### Infestation of tick *Aponomma gibsoni* (Acari: Ixodidae) in Monitor Lizard *Varanus bengalensis* from Nagpur, Maharashtra

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Monitor Lizard or Water Monitor lizard (*Varanus bengalensis*) is very common in Vidarbha region of Maharashtra state and often killed by the tribal community for black magic or medicinal purposes and sold surreptitiously. Wild and captive reptiles are generally infected with large number of parasites, but cause little harm to their health unless they are under stress, nevertheless, signs of parasitism depends on kind of parasite and body tissue involved. Tick parasite poses a direct threat to the health causing unthriftiness, restlessness and anaemia resulting in serious health hazards. Ticks have a significant role as vectors of various pathogens *eg. Rickettsia honei* (the etiologic agent of Flinders Island spotted fever) has been transmitted by *Aponomma hydrosauri* a tick associated with reptiles (Stenos *et al.*, 2003). Hence, the present communication deals with the infestation of *A. gibsoni* in Monitor Lizard from Nagpur, Maharashtra.

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A rescued Monitor Lizard was screened for ectoparasitic infestation. Ticks were encountered in the dorsal part of tail, collected, processed and examined in the laboratory. The identification was performed based on morphological characters described by Sen & Fletcher (1962).

Monitor lizard was found to be infested with male *A. gibsoni* conforms the findings of Tendeiro *et al.* (1950) who recorded *A. sp.* from Portugal. *Aponomma hydrosauri* was recorded in Australian reptiles (Bull *et al.*, 1976) and *A. (Bothriocroton) glebopalma* and *Amblyomma glauerti* in monitor lizard (*V. glebopalma* and *V. glauerti*) from Western and Northern territories, Australia (Keirans *et al.*, 1994). Bayless & Simmons (2000) evidenced tick parasites on the Rock Monitor Lizard (*V. albigularis*) from Tanzania, Africa. *Aponomma hydrosauri* was associated with reptiles and transmitted *Rickettsia honei* (Stenos *et al.*, 2003). Pietzsch *et al.* (2006) also collected tick parasites, *viz.*, *A. exornatum* and *A. latum*.

#### References

- Bull, M. & G.J. Sara (1976). The population structure of an Australian reptile tick, *Aponomma hydrosauri* (Acari: Ixodidae). I. Evidence from an esterase polymorphism. *Journal of Medical Entomology* 13(2): 137-142
- Bayless, M.K. & L.A. Simmons (2000). Tick parasites on the rock monitor lizard (*Varanus albigularis* Daudin, 1802) of Tanzania, Africa. *African Journal of Ecology* 38(4): 363-364.
- Keirans, J.E., D.R. King & R.D. Sharrad (1994). *Aponomma* (Bothriocroton) *glebopalma*, n. subgen., n. sp., and *Amblyomma glauerti* n. sp. (Acari: Ixodidae), parasites of monitor lizards (Varanidae) in Australia. *Journal of Medical Entomology* 31(1): 132-147.
- Pietzsch, M., R. Quest, P.D. Hillyard, J.M. Medlock & S. Leach (2006). Importation of exotic ticks into the United Kingdom via the international trade in reptiles. *Journal of Experimental and Applied Acarology* 38(1): 59-65.
- Sen, S.K. & B. Fletcher (1962). *Veterinary Entomology and Acarology for India*. 1<sup>st</sup> edition. ICAR, New Delhi.
- Stenos, J.S. Graves, V.L. Popov & D.H. Walker (2003). *Aponomma hydrosauri*, the reptile-associated tick reservoir of *Rickettsia honei* on Flinders Island, Australia. *American Journal of Tropical Medicine and Hygiene* 69(3): 314-317.
- Tendeiro, J. (1950). Ixodidae of Portuguese Guinea: *Aponomma hails* n. sp., monitor lizard parasite. *Annals of the Institute of Tropical Medicine, Lisbon* 7: 135-154.

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VET BRIEF

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### Incidence of helminth ova in Indian Elephants *Elephas maximus* at Theppakadu, Nilgiris, Tamil Nadu

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Indian Elephants *Elephas maximus* are commonly used for timber logging, transportation of material and for religious purposes in Indian temples. Like other domestic animals the elephants are also exposed to many of the parasitic diseases which cause weight loss, loss in productivity, etc. In this manuscript helminths infecting wild elephants at Theppakadu, Nilgiris is reported and discussed.

A total number of 25 dung boluses were received from the forest veterinary officer, Theppakadu, Nilgiris during March 2004 for routine faecal examination. The faecal boluses were processed under standard centrifugal floatation method and the helminth eggs were identified based on their morphology.

Of the 25 dung boluses from as many elephants, 11 elephants (44%) had helminth infection including trematode (*Schistosoma* sp.), cestode and

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