

also affected seed development in fruits. The larvae of the cecidozoa may be situated in the septa or in the cavity of the fruits. Horizontal section of gall showed *Eriophyes* spreading from the pierced cell. The effect of the reaction of the cell spread to other cells immediately in contact and only to a lesser extent to the cells away from the area of infection. The nuclear gigantism of the cell was attacked by the *Eriophyes* mites. This gall is used by tribals for medicinal purposes and thus constitutes an important record in the database of plant galls.

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ACKNOWLEDGEMENTS

We thank Dr. V.S. Rao, Director, Agharkar Research Institute, Pune for providing the necessary facilities. Discussion with Dr. V.G. Rao, Department of Mycology and Plant Pathology is gratefully acknowledged. Thanks are also due to the Director, Zoological Survey of India, Kolkata for encouragement.



VET BRIEF

ZOOS' PRINT JOURNAL 20(5): 1876

ACARIASIS IN AN EMU (*DROMAIUS NOVAELLANDIAE*) - A CASE REPORT

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Birds serve as hosts for a wide variety of ectoparasites including ticks and mites (Greve, 1986). These not only cause annoyance to the birds but also spread many pathogens including blood protozoa. The infestation by ectoparasites may alter the birds' behavior by reducing their appetite and result in constant preening and pecking of the affected parts. The present report puts on record, a case of tick infestation and its treatment in a captive emu.

The prestigious ratite a female Emu (*Dromaius novaellandiae*) in the Arignar Anna Zoological Park, Vandalur, was reported of having inappetance, constant preening and pecking and altered gait. The bird was active and responded to the keeper's call. A thorough clinical examination was carried out by physically

restraining it. To rule out any nutritional cause, the feed ingredients were checked and found to be normal. The droppings were examined and no ova or eggs of helminths were detected.

The bird preened the feathers particularly over the back region, which was examined thoroughly for wound, growths, inflammation or ectoparasites; no abnormalities could be detected. Then the whole body was examined, which revealed numerous ticks over the skin around the ear canal and lateral sides of the neck resulting in the observed symptoms. The ticks were collected for identification and were identified as *Haemaphysalis* sp. (Soulsby, 1986).

Treatment: The condition was treated by applying Deltamethrin solution (BUTOX liquid - Hoechst India Ltd.,) @ 2ml per liter of water sprayed on the affected areas taking care to avoid contact with eyes, left for twenty minutes and cleaned with water. The bird showed improvement from the next day and complete recovery in three days. The enclosure was also sprayed with the acaricide in higher concentration, after shifting the bird to a nearby enclosure. The treatment was repeated after a week to prevent reinfestation.

In this case it was difficult to identify the ticks because of the colour of the feathers and skin. The infested area seemed almost normal, with the ticks visible only on close and careful observation. The ticks were found localized in the head and neck regions. Greve (1986) opined that avian hard ticks prefer the head region where they are protected from being dislodged by preening. In this case, the bird was found preening the feathers over the back, but it was actually attempting to remove the ticks by rubbing the head and neck, which resulted in the altered gait.

Greve (1986) stated that wild birds might be responsible for the introduction of ticks into bird exhibits. The zoological park contains numerous free ranging peafowls and, the emu enclosure being an open enclosure, they frequent the enclosure in search of feed. Subramanian *et al.* (2002) reported the occurrence of ticks belonging to *Haemaphysalis* sp. in free ranging peafowls. So the peafowls might be the source of introduction.

The acaricide used in this case was found to be very effective in controlling the ticks. Greve (1986) suggested the use of rotenone, pyrethrin-piperonyl butoxide, malathion and carbaryl as safe and effective acaricides to be used on the birds.

To prevent such occurrences in future, it was planned to conduct periodic clinical examination of the bird and the enclosure and to take measures to avoid contact with free ranging peafowls.

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ACKNOWLEDGEMENT

The authors are thankful to the Director, Arignar Anna Zoological Park, Vandalur, Chennai for permitting to undertake the work.

