

RESEARCH NOTE

FIRST REPORT OF *SUIDASIA PONTIFICA* (ACARI : ACARIDAE) IN MILK POWDER

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Suidasia pontifica is an acarid mite that is cosmopolitan in distribution (Figs 1, 2). The mite has been found on rice bran, groundnuts, cowpeas, dead mosquitos, bird feed, peanut and milk confectionery (Fox, 1950; DeSouza and Pereira, 1970; Franzolin *et al*, 1994). The species is also a common inhabitant of house dust (Sharp and Haramoto, 1970; Pearson and Cunnington, 1973; Thomas *et al*, 1976; Furumizo and Thomas, 1977; Galvao and Guitton, 1986). Discussed herewith is the first report of the mite being found in milk powder.

In Thailand, on September 1995, a consumer reported that a can of milk powder was contaminated with living mites. The mites were discovered approximately 2 weeks after the can was opened. A sample of the contaminated milk powder was received by the Institute for Medical Research, Kuala Lumpur, Malaysia, on March 1996. On preliminary investigations, the milk sample was observed to be very dry. There were abundant dead and broken mites; no living mite was observed.

The milk sample was next suspended in concentrated lactic acid and heated with an open flame until it almost boiled. After cooling to room temperature, the suspension was examined under a dissecting microscope. Whole mites were picked

up and mounted directly in Hoyer's mounting medium; slides were kept in an incubator at 40°C for 1 week. Dried slides were then examined with a phase contrast microscope. A total of 37 specimens was examined and identified to be various stages of *Suidasia pontifica*.

It is not likely that contamination occurred during the production and packing stages as the conditions used during those processes are not conducive for the survival and multiplication of the mites. It is more likely that the mites contaminated the milk powder after the can was opened. The original density of mites at the time the contamination was first discovered could not be ascertained as such information is not available. The large numbers of mites that were found in the sample sent to this laboratory can be a result of the original population continuing to multiply after the sample was collected as there was no indication that the sample was treated by any decontamination processes.

Mites of the genus *Suidasia* can cause dermatitis (Samsinak *et al*, 1987). The mite may be involved in house dust sensitivity (Pearson and Cunnington, 1973). Cases of human intestinal infestation by these mites have been reported in Southern Veracruz (Martinez and Hoffmann, 1976). In China the



Fig 1- A female *Suidasia pontifica*.



Fig 2- A male *Suidasia pontifica*.

species causes pulmonary "acariasis" (Zhang *et al*, 1993). In light to the above, the ingestion of these mites accidentally may lead to some serious health problems.

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