

Accidental Poisoning from *Lantana camara* (Cherry Pie) Hay Fed to Ostriches (*Struthio camelus*)

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Sir,

I would like to take this opportunity to report an unusual case of poisoning from ingestion of *Lantana camara* in a flock of 14-month-old ostriches farmed in Pomona, 26 km from Harare city centre, Zimbabwe. *Lantana camara* toxicity has been previously reported in cattle (1) and parrots (2), but to date there are no reports in Ratites. If an animal eats sufficient quantities of the plant, photosensitisation sets in with liver damage and the accumulation of phylloerythrin in the blood, which sensitises the animal's skin to ultra-violet light. The sensitive areas of skin most severely affected include the nasal and facial areas, and when the skin peels away a reddish inflamed area is left. The condition also causes marked inflammation in the eyes and sexual orifices. Secondary bacterial infections are usually rampant. Hepatotoxicity is common (3). Significant *Lantana* toxins are the triterpene acids lantadene A (rehmannic acid), lantadene B, and their reduced forms, which cause the death of horses, cattle, sheep, goats, and rabbits (4,5). *Lantana* poisoning in cattle, sheep, buffalo, and guinea pigs causes obstructive jaundice, photosensitisation, a rise in serum glutamic oxaloacetic transaminase activity, and elevated hepatic and renal xanthine oxidase activity (6).

Cherry pie is a scrambling shrub that can grow up to 3.66 m in height, having numerous tetragonal branches often with hooked prickles (7) (Figure). The leaves are opposite, short petiolate cordate, ovate, and crenate,

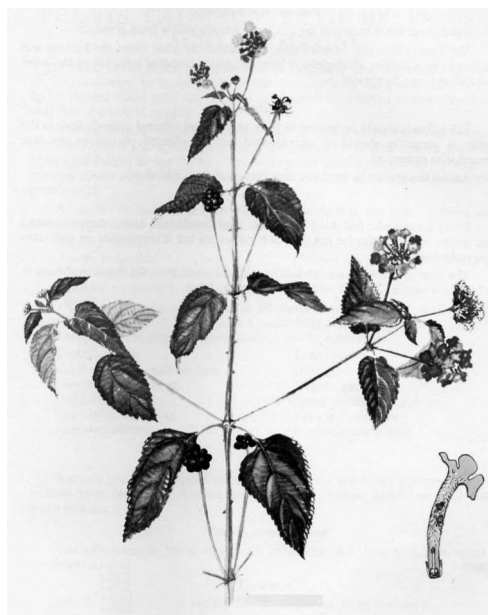


Figure. *Lantana camara* showing flowering branch and vertical section of a flower (reproduced with the permission of R.B. Drummond).

scabrous above and pubescent below. The flowers appear in terminal subcapitate clusters, with the outer flowers red and the inner ones yellow, or they all are white. The wild variety is much more toxic than the cultivated hybrid; however, a report has indicated that frosting exacerbates its toxicity (8). In the USA it is reported that the common myna spreads the seeds of *Lantana camara* (9). The plant

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bears a fleshy, 2-seeded purple-black drupe. It is a very common plant in Southern Africa, frequently encroaching grassy areas, and is found in gardens. In South Africa, it is one of the top 10 most invasive alien plant species (10). In the presented case study, the plant was observed growing adjacent to and within the ostrich paddocks.

In the current study, 3 ostriches presented with extremely inflamed eyes, with copious yellow exudates extending down their beaks and onto their necks. Conjunctivitis was observed in both eyes. Much of the skin on the eyelids and in areas surrounding the beak had become reddish and inflamed. They did not walk about and on examination their cloacae were reddish and inflamed. There was some loss of feathers in these areas. There was indication of *Staphylococcus* infestation of the skin surrounding the cloacae and pus confirmed by swelling. The sick ostriches were moved into a shaded area away from the main flock, topical antibacterial cream and cortisone were administered, and antibiotics were injected to counteract the secondary bacterial infection. Bentonite was administered by gavage at a dose of 5 g/kg in slurry

of water (11). Although activated charcoal has been described for the treatment of *Lantana* toxicity in sheep (12), it was not used in the current case due to expense. Despite treatment, within 10 days, one ostrich died and a post-mortem examination was performed.

Post-mortem examination of the viscera following a surgical transection through the neck and thoraco-abdominal areas revealed yellowish discolouration of the tissues and copious greenish-yellow fluid in the trachea. There were hard, dry mucus-encased pellets in the gut. Spots of secondary bacterial infection pervaded the lungs. The liver was noticeably enlarged, mottled, and degenerated with a yellow-orange tinge. The kidneys were swollen and olive-green in colour.

It is imperative that farmers prevent the encroachment of this plant onto pasture land where grass is cut and collected for the purpose of making hay. In the presented case study there was a great abundance of *Lantana* on the farm and the farmer was advised to dig it out and burn it. This proved more cost effective than resorting to herbicidal methods.

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