

# **Clinical, haematological, biochemical and pathological Manifestations of sub-acute toxicity of nicandra Physaloides (l) gaertn in calves**

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## **Abstract**

The plant *Nicandra physaloides* (solanaceae) has been widely associated with livestock poisoning in Kenya and elsewhere. The clinical signs reportedly associated with its poisoning in cattle are depression, circling, tremors, tachycardia, bloat, convulsions, coma and death. Although several cases have been suspected, there is no published information on the toxicology of this plant in Kenya. In this study the plant's subacute toxicity was determined in calves. Dried ground plant material was fed to calves for 14 weeks during which time blood was collected at weekly intervals for haematological and biochemical analysis in subacute toxicity studies. The treated calves transiently exhibited muzzle drying, cardiac arrhythmia, loose feces, and staggering gaits and reduced growth rate. The activity of the enzyme gamma-glutamyltransferase (GGT) AND THE MEAN CORPUSCULAR volume (mcv) were significantly lower ( $P < 0.05$ ) in the treated group. There was no significant difference ( $P > 0.05$ ) between the treated and untreated groups in total protein, hemoglobin, red blood cells, packed cell volume, mean corpuscular hemoglobin concentration, white blood cells, lymphocytes and neutrophils.