

PHENYLKETONURIA IN A MULE DEER (Odocoileus hemionus) 1

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The examination of Giemsa-stained blood smears from deer suggests that this disease is enzootic in East Texas and may be an important cause of mortality of deer.

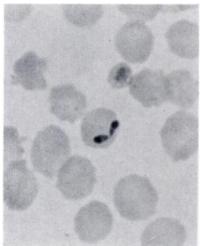


Figure 1. Babesia cervi (N. sp.) within an erythrocyte.

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PHENYLKETONURIA IN A MULE DEER (Odocoileus hemionus)

Potential space fluids and urine samples were taken from several mule deer collected in Northeast New Mexico during the spring, 1968. A urine sample, collected by manual expression of the bladder of a three year old buck, was tested for phenylpyruvic acid using Phenistix Reagent Strips (Ames Company, Inc., Elkhart, Ind.) and gave a positive test of more than 100 mg/100 ml urine. Urine samples from three other deer were tested with negative results. To our knowledge, this is the first reported case of phenylketonuria in mule deer. The buck suffering from this inherited metabolic disorder showed no obvious behavioral features indicative of the mental retardation associated with phenylketonuria in humans, and it had survived a relatively long time under natural conditions. Its weight, 105 lbs., compares favorably with the 97 and 110 lb. weights of two other adult bucks collected in the same area, indicating that it had developed normally despite its supposed handicap. The generally low weights of these three deer are indicative of the poor browse available in the collection area.

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