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BLOOD GROUP SYSTEM IN THE IBERIAN LYNX (*Lynx pardinus*)

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Objectives: Wild felids are reported to have the same blood group biochemical determinants in a way that they share with the domestic cat the AB blood group system. There is only one previous report on the Lynx genus; three Siberian lynx (*Lynx wrangeli*) and one Bobcat (*Lynx rufus*) were tested for blood types. All were from A blood type. There are no reports on the Iberian lynx (*Lynx pardinus*). The purpose of this study is to give an insight in the Iberian lynx blood group system.

Material & Methods: Eleven male and 18 female Iberian lynx aged between 16 and 1 year belonging to two different populations from either Doñana (13 animals) and Sierra Morena (16 animals), south Spain, were studied. Blood was collected into EDTA tubes and refrigerated at 4ºC. Blood typing was performed within 48 hours of collection, by the traditional tube method using *Triticum vulgaris* lectin in order to detect type B cats, and high-titered anti-A serum to detect type A cats. Anti-B and anti-A antibody titers were measured in 26 animals using serial serum two-fold dilutions incubated with a 2% suspension of type B and type A domestic cat erythrocytes and type A lynx erythrocytes. The strength of agglutination was scored macroscopically from 0 (negative) to 4+ (strongest). Serum samples were diluted until 1/16. All negative samples for macroscopic agglutination were observed for microscopic agglutination.

Results: All animals (n=29) were blood type A with the anti-A reaction being graded as 3+ (17 animals) to 4+ (12 animals) agglutination. Three out of 26 (11.5%) lynx were found to have anti-B antibody titers. RBC aglutination was observed from 1/2 (1 animal) to 1/4 (two animals) dilution. No other samples presented agglutination at macroscopic neither microscopic level. No samples had any evidence of anti-A antibodies when tested with type A erythrocytes from domestic cat or Iberian lynx.

Conclusions: The traditional blood typing method proved to be useful in the Iberian lynx species and the presence of anti-B antibodies lead us to suspect of the presence of type B animals. A larger number of animals need to be tested in order to confirm this supposition.

	Degree of agglutination				
	0	1+	2+	3+	4+
Anti-A serum	0	0	0	17	12
T. vulgaris	26	3	0	0	0

Table 1. Blood typing results. Number of animals and degree of agglutination (0 = negative and 4 + strongest result) from 29 Iberian Lynx (*Lynx pardinus)* blood samples, typed using anti-A serum and *Triticum vulgaris* lectin.

Bibliography.

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