

## Erythrocyte sizes of *Pipistrellus kuhlii* and *Hypsugo savii* from western Iran (Chiroptera, Vespertilionidae)

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### Abstract

We studied variation in the sizes of erythrocyte in two similar size and closely related species of bats (*Pipistrellus kuhlii* and *Hypsugo savii*) living in western Iran. The larger erythrocytes were found in *Pipistrellus kuhlii* and the smaller in *Hypsugo savii*. The RBC in both species shows acanthocytosis, poikilocytosis and anisocytosis. In *Pipistrellus kuhlii* most of the RBC's show acanthocytosis while in *Hypsugo savii* only 50% of RBC's show these cases. In *Pipistrellus kuhlii* 20% of RBC's are hypochromic.

**Key Words:** Bats, Blood smears, Erythrocyte size.

### Introduction

The biologists have been interested in studying the variation among various morphological and anatomical characteristics of closely related species. Such comparative approach to ecological morphology of species can provide insight in relationships between species characteristics and ecological peculiarities in any particular environment. Bats are known for their high species diversity and a remarkable variety in functional anatomy and morphology (Swartz et al., 2003) which enable them to be adapted to different ecological niche. However, there is not much information available on histological characteristics of closely related bat species.

2006). In east it ranges from the Black and Caspian Sea and the Caucasus Region to central Ukraine and the entire Middle East to Pakistan and southern regions of Central Asia (Horáček et al., 2000; Bates & Harrison, 1997). In Iran, this bat occurs both in Mesopotamian semi-deserts and in mountainous

Kuhl's pipistrelle, *Pipistrellus kuhlii* is a small bat with a circum-Mediterranean area distribution occurring in entire southern Europe, (Benda et al.,

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