## عنوان مقاله:

Geometric morphometric analysis of the second upper molar of the genus Apodemus (Muridae: Rodentia) in Northern Iran

## محل انتشار:

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#### خلاصه مقاله:

Wood mice of the genus Apodemus are widespread in temperate areas of the Palaearctic region. Dental shape variation and morphological differences among three species of Apodemus (A. witherbyi, A. hyrcanicus, A. uralensis) were investigated using outline-based geometric morphometrics of the second upper molar (M2/) and a morphological study of 92 museum specimens belonging to five populations of Apodemus in northern Iran (East Azerbaijan, Khorasan, Tehran, Golestan, and Noor) were analyzed and identified. All species were distinguishable by the shape of the second upper molar (M2/). The Noor population was identified as A. hyrcanicus, and the Khorasan, Tehran, East Azerbaijan populations overlap with specimens of A. witherbyi and are differentiated from A. uralensis and A. hyrcanicus. Two species (A. hyrcanicus and A. witherbyi) were detected in the population from Golestan. Morphological traits could not separate A. uralensis from A. witherbyi, and according to the results of canonical variate .analysis (CVA), only A. hyrcanicus is separate from the other two studied species

# كلمات كليدي:

Apodemus, geometric morphometrics, morphology, Iran, molar

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