

## عنوان مقاله:

Formation of modern and ancient soils in loess deposits of northern Iran

## محل انتشار:

اولین همایش بین المللی و سومین همایش ملی کواترنری با شعار (شناخت محیطی، آینده در امتداد گذشته) (سال: 1396)

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## نویسندگان:

Farhad Khormali - Dept. of Soil Sciences, Gorgan University of Agricultural Sciences and Natural Resources, Gorgan, ۴۹۱۳۸-۱۵۷۳۹, Iran

Martin Kehl - Institute of Geography, University of Cologne, Albertus Magnus Platz, ۵۰۹۲۳ Cologne, Germany

Manfred Frechen - Leibniz Institute for Applied Geophysics (LIAG), Geochronology and Isotope Hydrology, Stilleweg ۲, ۳۰۶۵۵ Hannover, Germany

## خلاصه مقاله:

Knowledge of pedogenesis provides unique information on the environment in which the soils formed. Pedogenesis of loess-derived modern soils was investigated along a precipitation gradient in northern Iran using morphological, micromorphological, mineralogical, biomarkers and stable isotopic techniques. Formation of diagnostic horizons, color index and illite/smectite ratio are the main morphological and mineralogical indices applied to differentiate the soils. Birefringence fabric and pedofeatures are the main micromorphological features capable of being correlated with the soil forming factors. Results showed that the degree of soil development are different along the climatic regions and are well correlated with the dominant bioclimate of the area. Upper Pleistocene Loess-paleosols sequences were also investigated along the mentioned climosequence in three regions. The intensity of soil development in the studied paleosols were correlated with their overlying modern soils. Generally its believed that the same precipitation gradient were present when the paleosols were formed. Modern soils applied for the underlying paleosols to estimate the past climate. Micromorphology was believed to be a powerful tool to deduce the paleoenvironment. In addition, this study emphasized the importance of pedogenetic investigations in the modern soils in order to simulate the past climate.

## کلمات کلیدی:

Loess-paleosols, modern soils, micromorphology, soil genesis

## لینک ثابت مقاله در پایگاه سیویلیکا:

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