

## عنوان مقاله:

The long-term effect of land-use change from forest to cropland in different slope aspects on soil chemical and physiological properties

## محل انتشار:

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## خلاصه مقاله:

Land-use change from forest to arable lands may have a major significance on soil processes, properties, and functioning. This research investigated the influence of long-term land-use change from untouched forests to arable lands under northern and southern slope aspects on soil physical and chemical properties. Six regions of the Zagros area in the west of Iran, where the increasing trend of forest to agricultural land conversion has occurred during the last decades, were selected for this study. Composite soil samples were collected from the 0-۲۰ cm depth in both the northern and southern slopes of native forests and their related cultivated areas. The highest dispersible clay and soil bulk density and the lowest aggregate stability were observed in cultivated areas. Soil organic carbon and total N declined in response to the land-use change from forest to cultivated areas in all study areas. The highest amounts of soil organic carbon, total N, C/N ratio, and available P were observed in northern slopes compared with southern slopes in some studied regions. In general, the conversion of natural forests to agricultural cropping systems resulted in soil quality declining. However, the deterioration intensity in the northern and southern slope aspects was similar .approximately

## کلمات کلیدی:

Cropland, Forest, Slope Aspect, Soil Quality, Tillage Systems

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