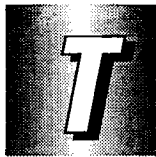


The soils surfaces features of the vegetation striped patterns in Mapimi reserve, North Mexico and their influence on the hydrodynamic

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he dynamics of vegetation striped patterns is related to the infiltration of surface runoff in the vegetated patches. Several authors hypothesised that a slow modification or soil surface features was the motor of this dynamics. In the Chihuahuan desert (North Mexico), we described the soil surface features of one stripe and used rainfall simulation tests to characterise its hydrologic behaviour. Simulations were performed on plots representative of the four soil surfaces features recognised in the stripes. Additionally, interception by one of the main plant species and stemflow were assessed using rainfall simulations. The results emphasised the capacity of interception of rainwater by the crown of the shrub and the high infiltration at its base. The three components of the system are thus tightly related and any change in one has impacts on the dynamics of the whole system.

❖ **KEY WORDS**

soils surfaces features, vegetation stripes, Mexico, rainfall simulation, hydrodynamics, interception, stemflow.

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