Summary

Paramo is the name of the region encountered in the upper belt (3 000m – 4 800m) of the Andean mountain ridges from Venezuela to the North of Peru. Paramo ecosystem occupies only 2% of the area of those countries. Nevertheless, paramo flora is the richest high mountain flora of the world (over 3500 species, 60% of endemism). High mountain region of the Northern Andes were almost uninhabited until the arrival of the Conquistadores. At the time of the conquest, livestock and new crops were introduced to the Andean ecosystems. Since that time, paramo has been used mainly for extensive cattle grazing and cultivation of potatoes and onions. During the last three centuries an abrupt intensification of the agricultural practices has occurred. The main aim of this study is to investigate the effects of human intervention, by mean of farming, on species diversity of the paramo vegetation. The study area was selected in the paramo belt of Santurban, Colombian Eastern Cordillera. Ordination techniques were applied to analyze the relation between plant species composition, environmental variables and management variables. We found plant species diversity is influenced by cattle grazing and cropping, but the vegetation changes are mainly determined by the altitudinal gradient. Intensity of human impact is also related to altitude. In Santurban, intensity of human impact decrease with increasing altitude whereas diversity of plants increase with increasing altitude.