Abstract

The riparian zone vegetation performs several functions for the ecosystem. It influences the hydrology, geomorphology, water chemistry; and supplies of allochthonous materials; therefore, it is important for the productivity and functioning of fluvial systems, stabilizing slopes, regulating temperature, filtering and retaining nutrients, and providing habitat to aquatic communities. This study followed a multiparametric approach in Central Chile mediterranean streams. The results showed that the variables that better reflect the distribution of macroinvertebrates were conductivity and dissolved solids. These variables also correlated significantly with bank quality and stream habitat. This approximation suggests the integral evaluation of a stream system as a tool for conservation and restoration of integral health of aquatic ecosystems.