Abstract: The present study was carried out to compute the straightforward formulations of information entropy for ecological sites and to arrange their locations along the ordination axes using the values of those entropic measures. The data of plant communities taken from six sites found in the Dedegül Mountain sub-district and the Sultan Mountain sub-district located in the Beyşehir Watershed was examined in the present study. Firstly entropic measures (i.e., marginal entropy, joint entropy, conditional entropy and mutual entropy) were computed for each of the sites. Next principal component analysis (PCA) was applied to the data composed of the values of those entropic measures. As a result of the first axis of the applied PCA, the arrangement of the sites was found meaningful from an ecological point of view because the sites were located along with the first component axis of the PCA by illustrating the climatic differences between the sub-districts.

Keywords: mutual entropy; conditional entropy; joint entropy; information theory; diversity based entropy