Introduction: Turkey is one of the richest countries in terms of biodiversity. Medical and aromatic plants have a considerable share in the plant diversity of biological diversity. It is clear that the demand for medical and aromatic plants in the world market is increasing day by day. Turkey has rich diversity of plant species due to its different ecological characteristics such as climatic, edaphic and geomorphologic conditions. In this kind of richness, medical and aromatic plants have a great economic potential.

Material and Methods: This study was carried out in the forested areas of Yenisarbademli (Isparta) province which is a region rich in plant diversity. In the study area, 12 medical and aromatic plant species were identified in total 70 sample plots. The aim of this study is to demonstrate the richness of species in areas where medical and aromatic plants are identified. Thus, it was aimed to reach the information about the species that the living area of each medical and aromatic plant identified was shared in the study area. Results: Gamma variability was calculated from biological diversity components during the first phase of work to indicate species richness. In the second phase of the study, information on the characteristics of site conditions of plant species with medicinal and aromatic characteristics determined in the sample areas was evaluated. The results were interpreted by taking into consideration the characteristics of the environmental factors such as elevation, slope, aspect and bedrock characteristics. End of the study, Rosa canina was found as a medical and aromatic plant species with the highest species richness in the study area. Discussion: The results obtained may differ according to the locality selected as the study area. It is obvious that the results from this study will be an important source of information for researchers working on medical and aromatic plants and ecology. In addition, different methods of calculating species richness are introduced in this study. Keywords: Medical and Aromatic Plants, Biodiversity, Species richness, Elevation, Rosa canina