Juniperus species, one of the important conifer genera are commonly distributed tree or shrub species in Turkey. In this study, yield characteristics and essential oil composition of two Juniper taxa, namely Juniperus foetidissima Willd. and Juniperus oxycedrus L. were analyzed in same sampling plots in the Lakes District of Turkey. For this purpose, the essential oils of air-dried ripe berries were obtained by hydrodistillation in a modified Clevengertype apparatus. Yields of essential oils were 0.59%±0.08 (v/w) and 2.43%±0.71(v/w) for J. oxycedrus and J. foetidissima respectively. The compounds of the essential oil for each species were determined by direct headspace sampling using solid-phase micro extraction coupled with gas chromatography/mass spectrometry (SPME−GC/MS). A total of 35 components were identified from J. oxycedrus and β-myrcene (59.16 % ±11.39), α-pinene (31.96 % ±11.07), limonene (4.48 % ±1.07) were the major components, respectively. On the other hand, 36 different components were identified from J. foetidissima and α-pinene (35.57 % ±16.70), sabinene (25.36 % ±9.33), limonene (23.06 % ±14.57) and β-myrcene (6.92 % ±0.57) were the major components, respectively.

Key Words: Juniper, Lakes district, berry, limonene, essential oil.