In this study, Achillea teretifolia Willd. collected in June, July and August 2012 were compared on the basis of the chemical compositions of oils obtained by hydrodistillation. In the case of June sample, 40 compounds were identified representing the 97.7 % of the total oil. Thirty eight constituents consisting 97.3 % of the total composition were determined in the oil of July sample. On the other hand, 28 components were obtained representing 98.7 % of the oil of August sample. The major constituents of three oils were described as 1,8-Cineole (35.8, 34.3 and 54.5 %), Camphor (14.2, 15.1 and 19.8 %), α-Thujone (6.7, 6.6 and 3.5 %) and Terpinen-4-ol (5.2, 4.1 and 3.7 %), respectively. The main compound groups of A. teretifolia Willd. oil samples from three reaping times were terpene oxides, ketones and alcohols with their contents being 37.9, 23 and 23.3% in the June sample, 36.6, 25.2 and 22 % in the July sample and 55.7, 24.4 and 14.1 % in the August sample, respectively. Keywords: Achillea teretifolia Willd., Reaping time, Essential oil, GC-MS