The results of the seed oils fatty acid analysis of the *Aconitum nasutum* and *Aconitum orientale* were shown in Table 1.

In the GC analysis, Linoleic acid (18:2) was found as major fatty acid component in the both *Aconitum* seed oil. Linoleic acid has comprised approximately 50% percentage of the oils. Oleic acid (18:1) was the second major fatty acid found in the oils. The quantity of Linoleic acid was 58.70% in *A. orientale* and was 49.25% in *A. nasutum*. In the same way, oleic acid was 27.77% in *A. orientale* and was 33.03% in *A. nasutum* oils.

The fatty acid composition of the *Aconitum* species studied in this study had in general usual fatty acid composition, they were not showed unusual fatty acid patterns. This is reported in the other *Aconitum* species 10,11.

The rest of the fatty acid components of *Aconitum* species studied here, had very low concentrations in the oils. While the palmitic acid was found as third major fatty acid component, myristic acid had lower concentrations in the both seed oil (Table 1). It is the same level with the *Aconitum napellus* and *A. turczaninovii*11. The others especially 20:0 groups poly-saturated and unsaturated- fatty acid components were not found or at the minimum concentrations determined. It is easy to say *Aconitum* seed oils studied has usual fatty acid composition and common fatty acids consists of the more of oil in the both species.

The fatty acid results obtained in the analysis were showed high congruence with the other *Aconitum* seed oils. In Aitzetmuller et al.11 study, with different *Aconitum* species - *Aconitum barbatum, A. paniculatum, A. ranunculifolium, A. septentrionale, A. napellus* - oleic and linoleic acid components were found as the major fatty acid. 20:0 and unsaturated forms were determined in a low level or not found.

Utelli et al.6 stated that there was high morphological variability within and among populations of the European *Aconitum* species and the morphological characters have no value as systematic characters. Systematic confusions on the *Aconitum*, have been reported in the Mucher21 study with the chorology of *Aconitum* taxa in Europe.

Aitzetmuller et al.11, reported that species of *Aconitum* do not contain fatty acids with 20 carbon atoms. On the other hand, same family genera, *Delphinium, Consolida, Nigella* and *Helleborus* species have contained C20 atoms. They found consistent C20 fatty acid pattern of 20:0 and the unsaturated forms of this fatty acid (20:1, 20: 2, 20:3) in the other genera of Ranunculaceae. They suggested that the chain elongation in the Ranunculaceae, 20:0 and long chain fatty acids had been lost only in the evolution of *Aconitum* (Aitzetmuller, et al., 11. Our results was supported this hypothesis.

It is known that a better knowledge of the seed fatty acid patterns could yield taxonomically useful results such as in the other plant family and genus 7,10.
The seed oil fatty acid patterns of Ranunculaceae were highly correlated with plant genera\textsuperscript{7,10,26,27}. But the pattern differences from genus to genus were very large, whereas those between different species of the same genus were often rather small, with only very few exceptions. Genus- to- genus differences in Ranunculaceae are larger than most family – to family differences elsewhere in the plant kingdom\textsuperscript{10}. It is requires to enlarge the number of the studied species of this family and genus members to support this hypothesis. Our studies on the other plant genus in the Ranunculaceae and the others have been continued.

The fatty acid composition of the plants have contributed more knowledge on the phylogeny of the various genera and family. For example, From the point of fatty acid analysis, Aitzetmuller \textsuperscript{10}, reported that Aquilegia and Thalictrum were closely related because both contain highly unusual 18:3 trans fatty acid, Columbinic acid (18:3 \(\delta 5\)-trans, 9 cis, 12 cis). It is possible to find very strong clues to obtain some approaches to the phylogeny of plant species by using some chemicals like fatty acids. Aitzetmuller et al. \textsuperscript{11}, showed a chemotaxonomical relation of genera in the family Ranunculaceae, based solely on information obtained from seed oil fatty acid fingerprints.

Key Words: Fatty Acid, Aconitum orientale, Aconitum nasutum, Chemotaxonomy, Türkiye