

Morphological Features of Section *Acutifolia* (Sphagnophyceae/Brophyta) in TurkeyMesut KIRMACI¹, Fulya FİLİZ¹, Uğur ÇATAK¹¹Biology department/Art and Science Faculty, Adnan Menderes University, Turkey

Aim of the study: *Sphagnum* genus belongs to *Sphagnopsida*, which is one of 6 classis (Takakiopsida, Sphagnopsida, Andreaeopsida, Andreaebryopsida, Polytrichopsida, and Bryopsida) in mosses (Bryophyta). This classis is thought to be evaluated as divisio by some researchers because of some particular morphological properties, special living habitats (mostly acidic environments), lack of peristome teeth (responsible for dispersion of spores), different cellular arrangements (contains chlorophyllose and hyalin cells) and lack of costa (midrib). In spite of this approach, researches show that genus should remain monophyletically in Bryophyta divisio. The diagnosis of sphagnum is difficult due to the wide variation range. Our purpose is to reveal the variation intervals of the taxa belonging to the section acutifolia with spread in Turkey.

Material and Methods: Materials of this study were collected between 2013-2016 during the revisional project on Turkish *Sphagnum* supported by TÜBİTAK (TBAG, grant no. 113Z631). All the characters (morphology, color, capitula, leaves, stem, cells, sporophytic characters ect.) used in the diagnosis for each plant were evaluated and numerical taxonomy was made by taking the arithmetic average.

Results: Thegenus Sphagnums which are placed under 7 sections represented by 23 taxa in our country. Among these, acutifolia is the richest section with 7 taxa and separated from other sections with anatomic structure of green cells. The taxa in the section are diagnosed by using the anatomical and morphological features of the body and branch leaves, the number of branch and the color of the plant and stem.

Acknowledgements: We cordially thanks to TÜBİTAK (The Scientific and Technical Research Council of Turkey) for financial support of project (T BAG 113Z631).

Keywords: Bryophyte, Sphagnum, Acutifolia, Morphology, Turkey