

Dauguma *N. canescens* individų su 2-10 trumpais ir 2-5 ilgiais ūgliais (X pav.), o *N. ericoides* – su 15-20 trumpų ūglių ir iki 5 ilgais ūgliais (X pav.).

*Bucklandiella sudetica* yra smulkesnės samanos, stiebo ilgis 0,9-1 cm (X pav.). *Bucklandiella heterosticha* stiebas 0,8-3,2 cm ilgio. *B. sudetica* lapai trumpesni 2.1-2,6 mm palyginus su *B. heterosticha*, kurių ilgis 2,42-3,68 mm (X pav.). *B. sudetica* lapai siauresni, 0,48-0,54 mm pločio, *B. heterosticha* lapai 1,6-2,2 mm pločio (X pav.). Abiejų rūšių gyslos ilgis panašus *B. heterosticha* - 1,6-2,2 mm, *B. sudetica* - 1,73-1,79 mm (X pav.). Šiek tiek trumpesnis šerelis būdingas *B. sudetica*, kuris yra 0,39-0,42 mm ilgio, o *B. heterosticha* - 0,42-1,42 mm ilgio (X pav.).

*Racomitrioideae* Ochyra&Bednarek-Ochyra is a relatively large subfamily cladocarpous or rarely acrocarpous mosses of the family *Grimmiaceae* Arn. Its species are medium-sized or large plants growing in tufts, cushions or extensive mats. They are common in cold, cool and temperate zones of both hemispheres and in the tropics they are restricted to montane and altimontane elevations.

During the course of the present study 140 specimens of *Racomitrioideae* subfamily mosses in Lithuania and country herbaria (BILAS, HSUD, WI, Viešvilės valstybinis herbaras) have been investigated. Hydrated specimens were examined for the qualitative characters and have been made detailed measurements. The locations observed cells and measured leaf dimensions are presented in Fig.2, 3. Observations on morphology.

Having examined specimens of *Racomitrioideae* subfamily, it is suggested that the subfamily includes four species, what are referable to 2 genera. All taxonomically important characters of gametophytes and sporophytes are reviewed in this work.

All Lithuanian species are described and illustrated with pictures and a key for determinations are constructed. The general distribution is presented by line maps (BEDNAREK-OCHYRA, 1995) and the Lithuanian distribution is presented on dot maps which are accompanied by full lists of specimens examined. Only *Niphotrichum canescens* is widespread through habitats. The plants *B. heterosticha* and *B. sudetica* are epipetric mosses growing in both open and shaded habitats. *Niphotrichum canescens* and *Niphotrichum ericoides* are epigeal mosses, growing in dry places. *N. ericoides* grows more in moist habitats. H. Bednarek-Ochyra ((BEDNAREK-OCHYRA, 1995)