An alkali-extractable O-methylated ribofuranose-containing heteroglycan, Nc-5-s, was isolated from wild-growing field colonies of the cyanobacterium Nostoc commune collected in Iceland, using ethanol fractionation and anion-exchange chromatography. The average molecular weight was estimated to be 1500kDa. Structural characterisation of the heteroglycan was performed by high-field NMR spectroscopy (1D proton, 2D-COSY, 2D-NOESY, 2D-TOCSY, 1H 13C-HSQC, HMBC, H2BC and HSQC-NOESY) as well as monosaccharide analysis after methanolysis by GC and supported by linkage analysis by GC–MS.
ISI indexed (2011): ISI indexed yes
Web of Science (2011): Indexed yes
BFI (2010): BFI-level 1
Scopus rating (2010): SJR 1.37 SNIP 1.79
Web of Science (2010): Impact factor 3.463
Web of Science (2010): Indexed yes
BFI (2009): BFI-level 1
Scopus rating (2009): SJR 1.426 SNIP 1.707
BFI (2008): BFI-level 1
Scopus rating (2008): SJR 1.137 SNIP 1.499
Web of Science (2008): Indexed yes
Scopus rating (2007): SJR 0.889 SNIP 1.373
Web of Science (2007): Indexed yes
Scopus rating (2006): SJR 0.827 SNIP 1.429
Web of Science (2006): Indexed yes
Scopus rating (2005): SJR 0.819 SNIP 1.334
Scopus rating (2004): SJR 0.903 SNIP 1.532
Scopus rating (2003): SJR 0.931 SNIP 1.402
Scopus rating (2002): SJR 0.806 SNIP 1.359
Scopus rating (2001): SJR 0.827 SNIP 1.05
Scopus rating (2000): SJR 0.756 SNIP 1.073
Scopus rating (1999): SJR 0.752 SNIP 1.051
Original language: English
Keywords: Nostoc commune, Cyanobacteria, Polysaccharides, High-field NMR, Structure elucidation
DOIs: 10.1016/j.carbpol.2012.08.063
Source: dtu
Source-ID: n:oai:DTIC-ART:elsevier/371098690::29375
Research output: Research - peer-review > Journal article – Annual report year: 2013