Isolation and NMR Characterization of Fumonisin B-2 and a New Fumonisin B-6 from Aspergillus niger - DTU Orbit (18/01/2019)

Isolation and NMR Characterization of Fumonisin B-2 and a New Fumonisin B-6 from Aspergillus niger

A new fumonisin, fumonisin B-6 (1), has been isolated by cation-exchange and reverse-phase chromatography, together with fumonisin B-2 (2), from stationary cultures of the fungus Aspergillus niger NRRL 326. Analysis of mass spectrometric and NMR data determined that FB6 is a positional isomer of FBI and iso-FB1, having hydroxyl functions at C3, C4, and C5. Analysis of the NMR data for FB2 showed very similar chemical shift values when compared to an authentic Fusarium FB2 standard, strongly indicating identical molecules despite that an absolute stereochemical assignment of FB2 from A. niger was not possible.

General information
State: Published
Organisations: Center for Microbial Biotechnology, Department of Systems Biology, Organic Chemistry, Department of Chemistry
Pages: 949-953
Publication date: 2010
Peer-reviewed: Yes

Publication information
Journal: Journal of Agricultural and Food Chemistry
Volume: 58
Issue number: 2
ISSN (Print): 0021-8561
Ratings:
BFI (2019): BFI-level 2
Web of Science (2019): Indexed yes
BFI (2018): BFI-level 2
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 2
Scopus rating (2017): CiteScore 3.64 SJR 1.269 SNIP 1.343
Web of Science (2017): Impact factor 3.412
Web of Science (2017): Indexed yes
BFI (2016): BFI-level 2
Scopus rating (2016): CiteScore 3.45 SJR 1.305 SNIP 1.343
Web of Science (2016): Impact factor 3.154
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 2
Scopus rating (2015): CiteScore 3.23 SJR 1.224 SNIP 1.245
Web of Science (2015): Impact factor 2.857
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 2
Scopus rating (2014): CiteScore 3.25 SJR 1.267 SNIP 1.413
Web of Science (2014): Impact factor 2.912
Web of Science (2014): Indexed yes
BFI (2013): BFI-level 2
Scopus rating (2013): CiteScore 3.44 SJR 1.43 SNIP 1.47
Web of Science (2013): Impact factor 3.107
ISI indexed (2013): ISI indexed yes
Web of Science (2013): Indexed yes
BFI (2012): BFI-level 2
Scopus rating (2012): CiteScore 3.2 SJR 1.408 SNIP 1.464
Web of Science (2012): Impact factor 2.906
ISI indexed (2012): ISI indexed yes
Web of Science (2012): Indexed yes
BFI (2011): BFI-level 2
Scopus rating (2011): CiteScore 3.1 SJR 1.389 SNIP 1.441