1. Record Nr. UNINA9910779384203321 **Titolo** Analysis, occurrence, and toxicity of c-methylaminoalanine (BMAA) [[electronic resource]]: a risk for the consumer? Pubbl/distr/stampa Copenhagen,: Nordic Council of Ministers, c2007 Descrizione fisica 1 online resource (131 p.) TemaNord;; 2007:561 Collana Amino acids - Toxicology Soggetti Neurotoxic agents Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia At head of title: Norden. Note generali Nota di bibliografia Includes bibliographical references. ""Content""; ""Preface""; ""Summary in English""; "" 1. Introduction""; "" 2. Nota di contenuto A historical perspective on the link between BMAA exposure and degenerative neurological disease""; ""2.1 Conclusions on cycad and BMAA exposure and degenerative neurological disease""; ""3. Case reports on animals, toxicological studies on cycad materials and preparations ""; ""3.1 Case reports on animals""; ""3.2 Studies on primates fed preparations from Cycas circinalis""; ""3.3 Studies on rodents fed preparations from Cycas circinalis""; ""3.4 Rodent studies on other cycad species than C. circinalis"" ""3.5 Conclusions on case reports and toxicological studies performed with cycad preparations. """4. BMAA as a natural toxicant in cycads and studies on BMAA toxicity""; ""4.1 Biosynthesis""; ""4.2 Effects in plants a €? a possible mechanism of action""; ""4.3 Toxicokinetics""; ""4.4 In vivo studies ""; ""4.5 Studies on infusion of BMAA directly into brain or brain ventricles""; ""4.6 In vitro studies ""; ""4.7 Conclusions on BMAA as a natural toxicant in cycads and on studies of BMAA toxicity""; ""5. Identity and physical and chemical properties of BMAA, and its chemical

""5.1 Identity """"5.2 Physical and chemical properties""; ""5.3

ninhydrin reaction""; "" 5.8 Conclusion on physical and chemical

Carbamates""; ""5.4 Bound BMAA""; ""5.5 Methods of analysis""; ""5.6 Development of an LC-MS/MS method and analysis of BMAA in cycads and cyanobacteria""; ""5.7 Analysis of cyanobacteria with HPLC and the

analysis""

properties of BMAA and methods of analysis""; ""6. Occurrence of BMAA i cycads""; ""6.1 Cycad plants from the genus Cycas""; ""6.2 Cycad flour""; ""6.3 Conclusions on occurrence of BMAA in cycads""
""7. The theory of biomagnification and identification of BMAA in human tissues"""7.1 Flying foxes""; ""7.2 Brain material and other tissues from control individuals and patients with degenerative neurological disease""; ""7.3 Conclusion on the theory of biomagnification of BMAA and identification of BMAA in human tissues""; ""8. Is BMAA produced by cyanobacteria ""; ""Conclusion on possible production of BMAA by cyanobacteria""; ""9. Conclusions""; ""10. Recommendations""; "" Sammanfattning (Summary in Swedish)""; ""11. References""; "" Annex 1""; ""Summaries of epidemiological studies""
""Annex 2""""Table 1. In vivo studies on cycad preparations""; "" Table 2.

In vivo studies on BMAA.""