

# Food Additives & Contaminants

PART A: CHEMISTRY • ANALYSIS • CONTROL • EXPOSURE & RISK ASSESSMENT

**EMTOX: Climate change impacts on natural toxins in marine and primary plant production system in north west Europe by 2040**

*Guest Editor: Hans J.P. Marvin*



Taylor & Francis  
Taylor & Francis Group

# Food Additives & Contaminants: Part A

Volume 29

Number 10

October 2012

## Contents

### Editorial

- EMTOX: Climate change impacts on natural toxins in marine and primary plant production system in north west Europe by 2040  
*H.J.P. Marvin* 1501

### Articles

- Selection of climate change scenario data for impact modelling  
*M. Sloth Madsen, C. Fox Maule, N. MacKellar, J.E. Olesen and J.H. Christensen* 1502
- Shifts in comparative advantages for maize, oat and wheat cropping under climate change in Europe  
*L. Elsgaard, C.D. Borgesen, J.E. Olesen, S. Siebert, F. Ewert, P. Peltonen-Sainio, R.P. Rötter and A.O. Skjelvåg* 1514
- Changes in time of sowing, flowering and maturity of cereals in Europe under climate change  
*J.E. Olesen, C.D. Borgesen, L. Elsgaard, T. Palosuo, R.P. Rötter, A.O. Skjelvåg, P. Peltonen-Sainio, T. Börjesson, M. Trnka, F. Ewert, S. Siebert, N. Brisson, J. Eitzinger, E.D. van Asselt, M. Oberforster and H.J. van der Fels-Klerx* 1527
- Expected shifts in *Fusarium* species' composition on cereal grain in Northern Europe due to climatic change  
*P. Parikka, K. Hakala and K. Tiilikkala* 1543
- A Dutch field survey on fungal infection and mycotoxin concentrations in maize  
*E.D. Van Asselt, W. Azambuja, A. Moretti, P. Kastelein, T.C. De Rijk, I. Stratakou and H.J. Van Der Fels-Klerx* 1556
- Statistical analysis of agronomical factors and weather conditions influencing deoxynivalenol levels in oats in Scandinavia  
*M. Lindblad, T. Börjesson, V. Hietaniemi and O. Elen* 1566
- Modelling mycotoxin formation by *Fusarium graminearum* in maize in The Netherlands  
*E.D. van Asselt, C.J.H. Booij and H.J. van der Fels-Klerx* 1572
- Mycotoxin contamination of cereal grain commodities in relation to climate in North West Europe  
*H.J. Van Der Fels-Klerx, S. Klemsdal, V. Hietaniemi, M. Lindblad, E. Ioannou-Kakouri and E.D. Van Asselt* 1581
- Climate change increases deoxynivalenol contamination of wheat in north-western Europe  
*H.J. van der Fels-Klerx, J.E. Olesen, M.S. Madsen and P.W. Goedhart* 1593
- Monitoring of *Dinophysis* species and diarrhetic shellfish toxins in Flødevigen Bay, Norway: inter-annual variability over a 25-year time-series  
*L.-J. Naustvoll, E. Gustad and E. Dahl* 1605
- Monitoring phytoplankton and marine biotoxins in production waters of the Netherlands: results after one decade  
*H.J. van der Fels-Klerx, P. Adamse, P.W. Goedhart, M. Poelman, I.E. Pol-Hofstad, H. van Egmond and A. Gerssen* 1616
- Marine downscaling of a future climate scenario in the North Sea and possible effects on dinoflagellate harmful algal blooms  
*Y.F. Friocourt, M. Skogen, W. Stolte and J. Albretsen* 1630
- Climate change impacts on natural toxins in food production systems, exemplified by deoxynivalenol in wheat and diarrhetic shellfish toxins  
*H.J. van der Fels-Klerx, J.E. Olesen, L.-J. Naustvoll, Y. Friocourt, M.J.B. Mengelers and J.H. Christensen* 1647