



## Curriculum vitae for Hans Brix:

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- European University at Budapest-Tihany, Hungary, 23-27 May 1994.
- 1997 Teacher at course on on-site wastewater treatment in Lithuania, in cooperation with 'Hedeselskabet'.
- 2001 Teacher at course "Wetland Management, Restoration and Applications", Zaragoza (Spain)
- 2003-2006 MSc Courses on Wetland Ecology and Use of Wetlands in Water Pollution Control, CanTho University, Vietnam

**M.Sc. students supervised:** 29

**Ph.D. students supervised:** 2

**Examinations:**

- External examiner in 'Limnology', University of Copenhagen
- External examiner of PhD-degrees at the Danish Technical University (DK), Sydney (Australia), Edinburgh (Scotland), Lund (Sweden), Padova (Italy), Firenze (Italy), Barcelona (Spain) and Chiang Mai (Thailand).

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### RESEARCH:

**Research interests:**

Freshwater ecology, wetland ecology and management, and the implementation of wetland systems for water pollution control (engineered and natural treatment wetlands). Focus is on the ecophysiology of aquatic macrophytes and biogeochemical cycling in wetland ecosystems. The research involves studies on ecosystem level, e.g. the emission of greenhouse gases from wetlands, as well as on the individual plant level, e.g. release of oxygen from plant roots, internal gas-transport in aquatic plants, and physiological characteristics of aquatic plants in relation to growth conditions (nutrient uptake). Applied aspects of the research involve the use of natural and constructed wetlands for the treatment of various kinds of polluted water. Selected recent research projects are:

- Morphological and physiological adaptations of wetland plants to low availability of inorganic phosphates.
- Effects of hydrology and nutrient availability on growth and ecophysiology of wetland plants.
- Effects of global climate change on wetland plants.
- The emission of greenhouse gases from a restored wetland ecosystem.
- DNA variation in *Phragmites* and its implications for taxonomy, biogeography, population biology and ecophysiology
- Development of guidelines for on-site constructed wetland systems.
- Wastewater treatment in biological sand filters

**Research experience:**

Dr. Brix has carried out research since 1979 on the ecophysiology of aquatic plants and biogeochemical cycling of nutrients and heavy metals in soil-water-plant components of wetland ecosystems. During the period 1979-1984 Dr. Brix studied the heavy metal and nutrient uptake in the marine eelgrass (*Zostera marina*), and bio-monitoring

**Professional experience:**

Dr. Brix's professional work has been primarily concerned with freshwater ecology, wetland ecology and management and the implementation of wetland systems for water pollution control (engineered and natural treatment wetlands). University research as well as work in the private sector is involved. Dr Brix has been involved as a supervisor in many constructed wetland projects, and has conducted feasibility studies in Denmark as well as in other countries. Dr Brix has worked with a wide variety of public and private organisations on wetland related matters. These include the Danish EPA, USEPA, DANIDA, IAWQ and UNDP at the national and international level, and several municipalities and counties on the local level. He has collaborated with several consulting engineering firms on the design and construction of wetland treatment systems.

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### LECTURES AT INTERNATIONAL CONFERENCES:

- 1982 III-Oikos Conference on Ecotoxicology, Lyngby (DK)
- 1984 12th Nordic Symposium on Sediments, Skallingen (DK)
- 1984 Symposium on Heavy Metals in Water Organisms, Balatonfüred (Hungary)
- 1985 13th Nordic Symposium on Sediments, Anaeboda (Sweden)

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- 1986 13th IAWPRC Biennial International Conference, Rio de Janeiro (Brazil)
- 1986 Seminar on the Use of Macrophytes in Water Pollution Control, Piracicaba (Brazil)
- 1988 Int. Conf. on Constructed Wetlands for Wastewater Treatment, Chattanooga (Tennessee, USA) - **INVITED SPEAKER**.
- 1989 Int. Conf. Design and Operation of Small Wastewater Treatment Plants, Trondheim (Norway).
- 1990 Int. Conf. Use of Constructed Wetlands in Water Pollution Control, Cambridge (UK)
- 1990 Int. Symp. Biological Approach to Sewage Treatment Process: Current Status and Perspectives, Perugia (Italy) - **INVITED SPEAKER**
- 1991 Australian Society for Limnology, annual meeting, Lorne, Victoria (Australia)
- 1991 Int. Symp. Constructed Wetlands for Water Quality Improvements, Pensacola (Florida) - **INVITED KEY SPEAKER**, 2 papers
- 1992 Int. Symp. on Biology and Management of Aquatic Plants, Daytona Beach, Florida (USA)
- 1992 Intecol's IV International Wetlands Conference, Columbus, Ohio (USA) - **INVITED SPEAKER**
- 1992 Int. Conf. on Wetlands Systems in Water Pollution Control, Sydney (Australia) - **INVITED KEY SPEAKER**
- 1993 Int. Conf. on Oxygen and Environmental Stress in Plants, St. Andrews (Scotland)
- 1994 Water Quality International, 17th Biennial Conference of the IAWQ, Budapest, Hungary, 24-29 July, 1994 - **INVITED KEY SPEAKER**
- 1994 4th International Conference on Wetland Systems for Water Pollution Control, Guangzhou, China, November 6-10, 1994 - **INVITED KEYNOTE**
- 1995 Int. Seminar on Natural and Constructed Wetlands for Wastewater Treatment and Reuse, Perugia (Italy) - **INVITED KEYNOTE**
- 1995 International Workshop on Reed Beds - Importance of a Plant community in Ecology and Technology, Iffeldorf, Germany, 5-9 September
- 1995 SCOPE workshop - Project on Ecological Engineering and Ecosystem Restoration, Tallinn, Estonia, November 5-9. - **INVITED SPEAKER**
- 1996 4<sup>th</sup> Symposium on Biogeochemistry of Wetlands, March 4-6, New Orleans, Louisiana
- 1996 5<sup>th</sup> Int. Conf. On Wetland Systems for Water Pollution Control, Vienna, September 1995 - **INVITED KEYNOTE**
- 1997 5<sup>th</sup> Symposium on Wetland Biogeochemistry, Royal Holloway, London
- 1997 International Workshop on Nutrient Cycling and retention in Wetlands, Trebon, Czech Republic, Sept. 1997
- 1998 Technical Workshop on Reclaimed Water Management, Palamós, Costa Brava, Spain, Juni 1998 - **INVITED SPEAKER**
- 1998 7th International Congress of Ecology (INTECOL), Florence, Italy, July 1998 - **INVITED SPEAKER**
- 1998 SCOPE workshop on Ecological Engineering and Ecosystem Restoration, Paris, France, July 29-31, 1998 - **INVITED SPEAKER**
- 1998 WAtER Inauguration Workshop, Brussels, September 1998
- 1999 The 6<sup>th</sup> International Conference on Wetland Systems for Water Pollution Control, Sao Pedro, Brazil September 27-October 2 1998 -- **INVITED SPEAKER**
- 2000 The 7<sup>th</sup> International Conference on Wetland Systems for Water Pollution Control, Lake Buena Vista, Florida
- 2000 Phytoremediation 2000: State of the Art in Europe. Cost Action 837, Hersonissos, Crete
- 2000 Quebec 2000: Millenium Wetland Event, 6<sup>th</sup> Int. Wetland Symposium, INTECOL, Quebec, Canada
- 2000 7<sup>th</sup> International Conf. on Wetland Systems for Water Pollution Control, Lake Buena Vista, Florida
- 2001 Cost Action 837: Phytoremediation of trace elements in contaminated soils and waters, Madrid, Spain
- 2001 Cost Action 837: Wastewater treatment and plants as a "green liver": The European approach, experience and trends, Lanarca, Cyprus.
- 2002 The 8<sup>th</sup> International Conference on Wetland Systems for Water Pollution Control, Arusha, Tanzania
- 2003 1st International Seminar on the Use of Aquatic Macrophytes for Wastewater Treatment in Constructed Wetlands, Portugal. **INVITED KEYNOTE**
- 2003 5th International Workshop on Nutrient Cycling and Retention in Natural and Constructed Wetlands, Czech Republic

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- 2003 International Conference on Constructed wetlands: applications and prospects, Volterra (Italy)  
2004 The 9<sup>th</sup> International Conference on Wetland Systems for Water Pollution Control, Avignon (France) **INVITED KEYNOTE**  
2004 7<sup>th</sup> INTECOL International Wetlands Conference, Utrecht, The Netherlands
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### INTERNATIONAL RESEARCH COOPERATION

- 1991 Dr. David Mitchel and Kate Bowmer, CSIRO, Australia, Division of Water Resources, Griffith Laboratory, New South Wales, Australia: Studies on gas-transport mechanisms in wetland plants  
1996-1999 Dr. Brix was the co-ordinator of a 3-year EU-funded project within the 4th Framework Programme on Environment and Climate entitled 'Dynamics and Stability of Reed-dominated Ecosystems in Relation to Major Environmental Factors that are Subject to Global and Regional Anthropogenically-induced Changes'. The project was carried out by research groups from nine European countries.  
1996 Prof. Irv Mendelsohn, Wetlands Biogeochemistry Institute, Louisiana State University, USA. Internal gas-transport in saltmarsh plants  
2002 Dr. Brian Sorrell, National Institute of Water and Atmospheric Research, Christchurch, New Zealand: Effects of temperature and elevated carbon dioxide on photosynthesis of wetland plants.  
1996-2003 Drs. ShiLi Miao and Fred Sklar, South Florida Water Management District: Macrophyte Nutrient Kinetics in the Everglades. (With Prof. Irv Mendelsohn, LSU)  
2003-2005 Optiroc Norway: Wastewater treatment in Filterbeds. (with Prof. Peter Jensen from Norway and others from Sweden and Finland)  
2005- Prof. Xanthulis Dimitri, Gembloux Agricultural University (Belgium); Southwest University of Science and Technology (China), Hanoi University of Civil Engineering (Vietnam): Development of teaching and training modules for higher education on low-cost wastewater treatment. EU ASIA link programme  
2005- Prof. Ranka Junge, University of Applied Science Waedenswil (Switzerland), Dr. Tjasa Griessler Bulc, LIMNOS (Slovenia), Prof. Petter Jenssen, Agricultural University of Norway (Norway), Dr. Oliver Baeder-Bederski, UFZ Centre for Environmental Research Leipzig-Halle (Germany), Prof. Nils Ekelund, Mid Sweden University (Sweden): Play with Water: Introducing ecological engineering to primary schools to increase interest and understanding of natural sciences. Coordinated action, EU 6<sup>th</sup> framework programme.
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### RESEARCH GRANTS:

- 1984: 524.000 DKR; Danish Natural Science Research Council (PhD-stipend)  
1990: 42.000 DKR; Danish Natural Science Research Council (Research visit Australia)  
1991: 50.000 DKR; Aarhus University Research Foundation (Equipment)  
1994: 94.508 DKR; Aarhus University Research Foundation (Equipment)  
1995: 37.445 DKR; Danish Natural Science Research Council (Research visit Louisiana)  
1996: 106.685 DKR; The Carlsberg Foundation (Gas-chromatograph)  
1996: 1.4 mill ECU; The European Commission, 4th framework programme: EUREED, Dynamics and Stability of Reed-dominated Ecosystems (Dr. Brix project coordinator)  
1996: 315.000 US\$; South Florida Water Management District: Macrophyte Nutrient Kinetics in the Everglades.  
1999: 450.000 DKR, Danish Natural Science Research Council: Effects of Global Change on Freshwater Macrophytes.  
2000: 48.900 US\$; South Florida Water Management District: Restoration of Water Levels and Nutrients  
2001: 290.040 DKR; Danish Natural Science Research Council: Morphological and Physiological Adaptations to Low Phosphate Levels by Wetland Plants  
2001: 134.600 DKR; Danish Natural Science Research Council (Research visit New Zealand)  
2001: 924.421 DKR; Ministry of Environment: Guidelines for Green Wastewater Treatment Systems  
2001: 660.000 DKR; Danish Natural Science Research Council: ICP-OES for Analysing of Metals in Water, Soils and Biological Materials  
2001: 200.000 DKR; Aarhus University Research Foundation: Restoration of River Skjern Å.

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- 2002: 605.972 DKR; Danish Natural Science Research Council: Flow-Injection-Analysis of Ammonium, Nitrate and Phosphate in Water.
- 2003: 600.000 DKR; Danish Natural Science Research Council: DNA variation in *Phragmites* and its implications for Taxonomy, Biogeography, Population Biology and Ecophysiology
- 2003: 281.352 DKR; Danish Natural Science Research Council: Microwave Digestion System
- 2003: 32.083 DKR; Danish Natural Science Research Council: Easing of workload
- 2003: 360.000 DKR; Ministry of Environment: Wastewater Treatment in Biological Sand Filters.
- 2003: 610.000 NOK; Optiroc Norway: "Wastewater Treatment in Filter Beds"
- 2004: 64.166 DKR; Danish Natural Science Research Council: Easing of workload
- 2004: 83.000 DKR; Århus Municipality, Skanderborg Municipality, Rudbjerg Municipality, Fakse Municipality, Brødstrup Municipality and Danske Kloakmestre: Experiments with precipitation of phosphorus in sedimentation tanks.
- 2005: 700.000 DKR; Danish Natural Science Research Council: Growth Chamber for Ecophysiological Studies of Plants
- 2005: 40.800 EURO; European Commission, 6<sup>th</sup> Framework Programme: WasteWaterResource.
- 2005: 110.223 EURO; European Commission, 6<sup>th</sup> Framework Programme:: Asia-Link: Development of teaching and training modules for higher education on low-cost wastewater treatment.
- 2005: 436.440 DKR; Danish Natural Science Research Council: Clone specific differences in *Phragmites*.
- 2005: 62.600 DKR; Aarhus University Research Foundation: Funds for guest professor.
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### ADMINISTRATION AND MANAGEMENT:

#### Department, Faculty, Studies

- Head of Section of Plant Biology, Department of Biological Sciences, Aarhus University: 2001 →
- Member of the research board of the Department of Biological Sciences, Aarhus University: 2004 →
- Member of the works committee of the Department of Biological Sciences, Aarhus University: 2004 →
- Member of the safety committee of the Department of Biological Sciences, Aarhus University: 2004 →
- Member of board of the Department of Biological Sciences, Aarhus University, Denmark: 2001-2004.
- Member of the study board, Department of Biological Sciences, Aarhus University, Denmark: 1996-1998

#### National

- Member of the Danish Natural Science Research Council (2003 → )
- Member of the committee for the State Library and the Natural History Museum, Aarhus (2006 → )
- Member of the corps of external examiners in Biology (1998 → )

#### International

- Member Society of Wetland Scientists International Awards Subcommittee, 2006-2009.
- Member European Science Foundation Standing Committee for Life, Earth and Environmental Sciences (LESC), 2006 →
- Editorial Advisory Board of the scientific journals: Aquatic Botany (1996→ ), Ecological Engineering - the Journal of Ecotechnology (1994→ ), International Journal of Ecology and Environmental Sciences (1994→ )
- Danish Management Committee Member of COST action 837 "Phytoremediation" (1998-2003) and COST action 859 "Phytotechnologies to promote sustainable land use and improve food safety" (2004→ )
- Danish member of the EC/EWPCA Study Group on Emergent Hydrophyte Treatment Systems (1987-1990)
- Chairman and founder of the IAWPRC Specialist Group on the Use of Macrophytes in Water Pollution Control (1987-1992)
- Secretary and Newsletter Editor of the IAWQ Specialist Group on the Use of Macrophytes in Water Pollution Control (1992-1996)
- Member of Project Advisory Committee on research project: Advanced Constructed Wetland Technology in Pollution Control, Sydney, Australia (1992-1995)
- Member of DANIDA expert panel on a UNDP Proposal concerning Engineered Wetlands at Lake Manzala, Egypt. (1994)
- Member of the Scientific Steering Committee of Ecological Summit 96, Copenhagen, 19-23 August (1996)

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- Chairman of the Scientific Committee of the International Conference on *Phragmites*-dominated wetlands, their functions and sustainable use, April 18-23, 1999, Trebon, Czech Republic (1997)
  - Moderator (Chairman) and editor for session on "Macrophytes" at the International Symposium on Constructed Wetlands for Water Quality Improvement, Pensacola, Florida. (1991)
  - Evaluation of the Byron Bay Wetland Treatment System, Byron Bay (Australia) (1993)
  - Organizer and chairman for "International conference on *Phragmites*-dominated wetlands" (1999);
  - Journal referee service: Acta Botanica Croatica, Annals of Botany, Aquatic Botany, Archiv für Hydrobiologie, Biogeochemistry, Chemosphere, Ecological Engineering, Environmental Pollution, Environmental Science and Technology, Hydrobiologia, International Biodeterioration and Biodegradation, Journal of Environmental Science and Health, Journal of Ecology, Journal of Environmental Quality, Journal of Environmental Engineering & Science, Limnology and Oceanography, Marine Ecology Progress Series, Water air and Soil Pollution, Water Research, Water Science and Technology
  - Grant referee service: Volkswagen Stiftung (Germany), Grant Agency Czech Republic (Czech Republic), Der Wissenschaftsfonds (Austria),
  - Dr. Brix has been a member of the Scientific Programme Committees of 20+ international scientific conferences
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## PUBLICATIONS

84 papers in peer reviewed scientific journals (with approx 1350 citations according to ISI Web of Science); 23 books and book chapters; 33 papers in conference proceedings, and 29 reports and popular science papers

### Submitted:

Pagter, M., Bragato, C., Malagoli, M. & **Brix H.** (200x). Comparative effects of NaCl and Na<sub>2</sub>SO<sub>4</sub> on *Phragmites australis*. – *Journal of Experimental Botany* (submitted)

### Peer-reviewed JOURNALS:

- Bragato, C., **Brix, H.** & Malagoli, M. (2006) Accumulation of nutrients and heavy metals in *Phragmites australis* (Cav.) Trin. ex Steudel and *Bolboschoenus maritimus* (L.) Palla in a constructed wetland of the Venice lagoon watershed. – *Environmental Pollution* (in press)
- Lambertini, C., Gustafson, M.H.G., Frydenberg, J., Lissner, J., Speranza, M. & **Brix, H.** (2006). A phylogeographic study of the cosmopolitan genus *Phragmites* (Poaceae) based on AFLPs. – *Plant Systematics and Evolution* (in press)
- Munzarova, E., Lorenzen, B., **Brix, H.**, Vojtiskova, L. and Votrubova, O. (2006) Effect of NH<sub>4</sub><sup>+</sup>/NO<sub>3</sub><sup>-</sup> availability on nitrate reductase activity and nitrogen in wetland helophytes *Phragmites australis* and *Glyceria maxima*. - *Environmental and Experimental Botany* 55: 49-60.
- Nielsen, U.N, Riis, T. & **Brix, H.** (200x). The effect of weed cutting on *Luronium natans*. – *Aquatic Conservation* (in press)
- Nielsen, U.N, Riis, T. & **Brix, H.** (2006). The importance of vegetative and sexual dispersal of *Luronium natans*. – *Aquatic Botany* 84: 165-170
- Brix, H.** & Arias, C.A. (2005). The use of vertical flow constructed wetlands for on-site treatment of domestic wastewater: New Danish guidelines. *Ecological Engineering* 25: 491-500
- Chen, H., Mendelsohn, I.A., Lorenzen, B., **Brix, H.**, Miao, S. (2005). Growth and nutrient responses of *Eleocharis cellulosa* (Cyperaceae) to phosphate level and redox intensity. – *American Journal of Botany* 92(9): 1457-1466.
- Brix, H.** & Arias, C.A. (2005). Danish guidelines for small-scale constructed wetland systems for onsite treatment of domestic sewage. - *Water Science and Technology* 51(9): 1-9.
- Arias, C.A. & **Brix, H.** (2005). Phosphorus removal in constructed wetlands: Can suitable alternative media be identified? - *Water Science and Technology* 51(9): 267-273.
- Pagter, M., Bragato, C. & **Brix, H.** (2005). Tolerance and physiological responses of *Phragmites australis* to water deficit. – *Aquatic Botany* 81: 285-299
- Tylova-Munzarova, E., Lorenzen, B., **Brix, H.**, Votrubova, O. (2005). The effects of NH<sub>4</sub><sup>+</sup> and NO<sub>3</sub><sup>-</sup> on growth, resource allocation and nitrogen uptake kinetics of *Phragmites australis* and *Glyceria maxima*. – *Aquatic Botany* 81: 326-342
- Arias, C.A., **Brix, H.** & Marti, E. (2005). Recycling of treated effluents enhances removal of total nitrogen in vertical flow constructed wetlands. – *Journal of Environmental Science and Health Part A -Toxic/Hazardous Substances & Environmental Engineering* 40 (6-7): 1431-1443

- Brix, H.** (2004). Directives danoises pour les marais artificiels de petites tailles en assainissement non collectif. – *Ingénieries No spécial*: 57-65. (in French)
- Busch, J., Mendelssohn, I.A., Lorenzen, B., **Brix, H.** & Miao, S. (2004). Growth responses of the Everglades wet prairie species *Eleocharis cellulosa* and *Rhynchospora tracyi* to water level and phosphate availability. - *Aquatic Botany* 78(1): 37-54.
- Arias, C.A., Cabello, A., **Brix, H.** & Johansen, N.H. (2003). Removal of indicator bacteria from municipal wastewater in an experimental two-stage vertical flow constructed wetland system. - *Water Science and Technology* 48(5): 35-41.
- Arias, C.A., **Brix, H.** & Johansen, N.H. (2003). Phosphorus removal from municipal wastewater in an experimental two-stage vertical flow constructed wetland system equipped with a calcite filter. - *Water Science and Technology* 48(5): 51-58.
- Arias, C.A. & **Brix, H.** (2003). Humedales artificiales para el tratamiento de aguas residuales. - *Revista Ciencia e Ingeniería Neogranadina* 13: 17-24 (in Spanish)
- Sorrell, B.K. & **Brix, H.** (2003). Effects of water vapour pressure deficit and stomatal conductance on photosynthesis, internal pressurization and convective flow in three emergent wetland plants. - *Plant and Soil* 253: 71-79.
- Lissner, J., Mendelssohn, I.A., Lorenzen, B., **Brix, H.**, McKee, K.L., & Miao, S.L. (2003). Interactive effects of redox intensity and phosphate availability on growth and nutrient relations of *Cladium jamaicense* (Cyperaceae). - *American Journal of Botany* 90: 736-748.
- Del Bubba, M., Arias, C.A., & **Brix, H.** (2003). Phosphorus absorption maximum of sands for use as media in subsurface flow constructed reed beds as measured by the Langmuir isotherm. - *Water Research* 37: 3390-3400.
- Brix, H.**, Dyhr-Jensen, K., & Lorenzen, B. (2002). Root-zone acidity and nitrogen source affects *Typha latifolia* L. growth and uptake kinetics of ammonium and nitrate. - *Journal of Experimental Botany* 53: 2441-2450.
- Kuhn, N.L., Mendelssohn, I.A., McKee, K.L., Lorenzen, B., **Brix, H.**, & Miao, S.L. (2002). Root phosphatase activity in *Cladium jamaicense* and *Typha domingensis* grown in everglades soil at ambient and elevated phosphorus levels. - *Wetlands* 22: 794-800.
- Arias, C.A., Del Bubba, M., & **Brix, H.** (2001). Phosphorus removal by sands for use as media in subsurface flow constructed reed beds. - *Water Research* 35: 1159-1168.
- Brix, H.**, Arias, C.A., & Del Bubba, M. (2001). Media selection for sustainable phosphorus removal in subsurface flow constructed wetlands. - *Water Science and Technology* 44(11-12): 47-54.
- Brix, H.**, Sorrell, B.K., & Lorenzen, B. (2001). Are *Phragmites*-dominated wetlands a net source or net sink of greenhouse gases? - *Aquatic Botany* 69: 313-324.
- Brix, H.** & Cizkova, H. (2001). Introduction: *Phragmites*-dominated wetlands, their functions and sustainable use. - *Aquatic Botany* 69: 87-88.
- Clevering, O.A., **Brix, H.**, & Lukavska, J. (2001). Geographic variation in growth responses in *Phragmites australis*. - *Aquatic Botany* 69: 89-108.
- Gervin, L. & **Brix, H.** (2001). Removal of nutrients from combined sewer overflows and lake water in a vertical-flow constructed wetland system. - *Water Science and Technology* 44(11-12): 171-176.
- Gregersen, P. & **Brix, H.** (2001). Zero-discharge of nutrients and water in a willow dominated constructed wetland. - *Water Science and Technology* 44(11-12): 407-412.
- Lessmann, J.M., **Brix, H.**, Bauer, V., Clevering, O.A., & Comin, F.A. (2001). Effect of climatic gradients on the photosynthetic responses of four *Phragmites australis* populations. - *Aquatic Botany* 69: 109-126.
- Lorenzen, B., **Brix, H.**, Mendelssohn, I.A., McKee, K.L., & Miao, S.L. (2001). Growth, biomass allocation and nutrient use efficiency in *Cladium jamaicense* and *Typha domingensis* as affected by phosphorus and oxygen availability. - *Aquatic Botany* 70: 117-133.
- Lorenzen, B., **Brix, H.**, McKee, K.L., Mendelssohn, I.A., & Miao, S. (2000). Seed germination of two Everglades species, *Cladium jamaicense* and *Typha domingensis*. - *Aquatic Botany* 66: 169-180.
- Cizkova, H., **Brix, H.** & Herben, T. (2000). Ecology of *Phragmites* populations in the changing landscape. – *Folia Geobotanica* 35: 351
- Brix, H.** (1999). Ecological engineering for wastewater treatment (book review). - *Ecological Engineering* 12: 411-413.
- Brix, H.** (1999). Genetic diversity, ecophysiology and growth dynamics of reed (*Phragmites australis*). - *Aquatic Botany* 64: 179-184.
- Brix, H.** (1999). How 'green' are aquaculture, constructed wetlands and conventional wastewater treatment systems? - *Water Science and Technology* 40(3): 45-50.
- Brix, H.** (1999). The European research project on reed die-back and progression (EUREED). - *Limnologica* 29: 5-10.
- Cízková, H., **Brix, H.**, Kopecky, J., & Lukavska, J. (1999). Organic acids in the sediments of wetlands dominated by *Phragmites australis*: Evidence of phytotoxic concentrations. - *Aquatic Botany* 64: 303-315.
- Grünfeld, S. & **Brix, H.** (1999). Methanogenesis and methane emissions: effects of water table, substrate type and presence of *Phragmites australis*. - *Aquatic Botany* 64: 63-75.

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- Mendelssohn, I.A., Sorrell, B.K., **Brix, H.**, Schierup, H.-H., Lorenzen, B., & Maltby, E. (1999). Controls on soil cellulose decomposition along a salinity gradient in a *Phragmites australis* wetland in Denmark. - *Aquatic Botany* 64: 381-398.
- Romero, J.A., **Brix, H.**, & Comín, F.A. (1999). Interactive effects of N and P on growth, nutrient allocation and NH<sub>4</sub> uptake kinetics by *Phragmites australis*. - *Aquatic Botany* 64: 369-380.
- Jespersen, D.N., Sorrell, B.K., & **Brix, H.** (1998). Growth and root oxygen release by *Typha latifolia* and its effects on sediment methanogenesis. - *Aquatic Botany* 61: 165-180.
- Lorenzen, B., **Brix, H.**, Schierup, H.-H., & Madsen, T.V. (1998). Design and performance of the Phyto-Nutri-Tron: a system for controlling the root and shoot environment for whole-plant ecophysiological studies. - *Environmental and Experimental Botany* 39: 141-157.
- Brix, H.** (1997). Do macrophytes play a role in constructed treatment wetlands? - *Water Science and Technology* 35(5): 11-17.
- Madsen, T.V. & **Brix, H.** (1997). Growth, photosynthesis and acclimation by two submerged macrophytes in relation to temperature. - *Oecologia* 110: 320-327.
- Sorrell, B.K., **Brix, H.**, & Orr, P.T. (1997). *Eleocharis sphacelata*: internal gas transport pathways and modelling of aeration by pressurized flow and diffusion. - *New Phytologist* 136: 433-442.
- Sorrell, B.K., **Brix, H.**, Schierup, H.-H., & Lorenzen, B. (1997). Die-back of *Phragmites australis*: Influence on the distribution and rate of sediment methanogenesis. - *Biogeochemistry* 36: 173-188.
- Brix, H.**, Sorrell, B.K., & Schierup, H.-H. (1996). Gas fluxes achieved by in situ convective flow in *Phragmites australis*. - *Aquatic Botany* 54: 151-163.
- Brix, H.** & Sorrell, B.K. (1996). Oxygen stress in wetland plants: comparison of de-oxygenated and reducing root environments. - *Functional Ecology* 10: 521-526.
- Dyhr-Jensen, K. & Brix, H. (1996). Effects of pH on ammonium uptake by *Typha latifolia* L. - *Plant Cell and Environment* 19: 1431-1436.
- Kadlec, R.H. & **Brix, H.** (1995). Wetland systems for water pollution control 1994 - Preface. - *Water Science and Technology* 32(3).
- Bendix, M., Tornbjerg, T., & **Brix, H.** (1994). Internal gas transport in *Typha latifolia* L and *Typha angustifolia* L .1. Humidity-induced pressurization and convective throughflow. - *Aquatic Botany* 49: 75-89.
- Brix, H.**, Lorenzen, B., Morris, J.T., Schierup, H.-H., & Sorrell, B.K. (1994). Effects of oxygen and nitrate on ammonium uptake kinetics and adenylate pools in *Phalaris arundinacea* L and *Glyceria maxima* (Hartm) Holmb. - *Proceedings of the Royal Society of Edinburgh Section B* 102: 333-342.
- Brix, H.** (1994). Functions of macrophytes in constructed wetlands. - *Water Science and Technology* 29(4): 71-78.
- Brix, H.** (1994). Use of constructed wetlands in water pollution control: Historical development, present status, and future perspectives. - *Water Science and Technology* 30(8): 209-223.
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