

**Suchara I., Sucharová J.: Bioindikace znečištěného ovzduší a úrovní atmosférických spadů**

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### Citovaná literatura

Adams S.M. (Ed.) 2002. Biological Indicators of Aquatic Ecosystem Stress. American Fisheries Society, Bethesda, MD., 656 pp.

Arndt U., Nobel W., Nobel B. 1987. Bioindikatoren: Möglichkeiten, Grenzen und neue Erkenntnisse. Eugen Elmer Verlag, Stuttgart 388 pp.

Atkinsen R., Arey J. 2003. Gas-phase tropospheric chemistry of biogenic volatile organic compounds: a review. *Atmospheric Environment*. 37(Supl. 2): S197–S219. [https://doi.org/10.1016/S1352-2310\(03\)00391-1](https://doi.org/10.1016/S1352-2310(03)00391-1)

Batell S.M. 2006. Biomarkers, Biomonitoring and Ecological Risk Assessment. A brief Review and Evaluation. *Environmental Bioindicators* 1: 60–73. <https://doi.org/10.1080/15555270591004920>

Blumenthal D.L., White W.H., Smith T.B. 1978. Anatomy of a Los Angeles smog episode: Pollutant transport in the daytime sea breeze regime. *Atmospheric Environment* (1967) 12(4): 893–907. [https://doi.org/10.1016/0004-6981\(78\)90028-8](https://doi.org/10.1016/0004-6981(78)90028-8)

Bobbink R., Loran C., Tomassen H. (Eds.) 2022. Review and revision of empirical critical loads of nitrogen for Europe. Umwelt Bundesamt, Dessau-Roßau, PDF Report.

Boots B., Russell C.W., Green D.S. 2019. Effects of Microplastics in Soil Ecosystems: Above and Below Ground. *Environmental Science and Technology* 53(19): 1149–11506. <https://doi.org/10.1021/acs.est.9b03304>

Bozzano G.L. 1991. Bioindicators and Environmental Management. Academic Press, London – Toronto, 450 pp.

Caldana C.R.G., Hanai-Yoshida V.M., Paulino T.H., Baldo D.A., Freitas N.P., Aranha N., Vila M.M.D.C., Balcão V.M., Oliveira Junior J.M. 2023. Evaluation of urban tree barks as bioindicators of environmental pollution using the X-ray fluorescence technique. *Chemosphere* Pt. 2: 137257. <https://doi.org/10.1016/j.chemosphere.2022.137257>

Centi M.E., Cecchetti G. 2001. Biological monitoring: lichens as bioindicators of air pollution assessment – a review. *Environmental Pollution* 114: 171–492. [https://doi.org/10.1016/S0269-7491\(00\)00224-4](https://doi.org/10.1016/S0269-7491(00)00224-4)

Choudhary S., Rani H., Devika O S., Patra A., Singh R.K., Prasad S.K. 2019. Impact of fluoride on agriculture: A review on its sources, toxicity in plants and mitigation strategies. *International Journal of Chemical Studies* 7(2): 1675–1680. Available on [https://www.researchgate.net/publication/332470626\\_Impact\\_of\\_fluoride\\_on\\_agriculture\\_A\\_review\\_on\\_it's\\_sources\\_toxicity\\_in\\_plants\\_and\\_mitigation\\_strategies](https://www.researchgate.net/publication/332470626_Impact_of_fluoride_on_agriculture_A_review_on_it's_sources_toxicity_in_plants_and_mitigation_strategies)

Chrąbszcz M., Mróz L. 2017, Tree Bark – a Valuable Source of Information on Air Quality. *Polish Journal of Environmental Studies* 26(2): 453–466. <https://doi.org/10.15244/pjoes/65908>

COM 2001. Communication from the Commission The Clean Air for Europe (CAFE) Programme: Towards a Thematic Strategy for Air Quality, Commission of the European Communities COM 2001, 245 final, Brussels.

<https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2001:0245:FIN:en:PDF>

Conti M.E. (Ed.) 2008. Biological Monitoring: Theory and Applications. Bioindicators and Biomarkers for Environmental Quality and Human Exposure Assessment. WIT Press, Southampton (U. K.) and Billerica (Mass.), 228 pp.

EU 2016. Directive (EU) 2016/2284 of the European Parliament and of the Council of 14 December 2016 on the reduction of national emissions of certain atmospheric pollutants, amending Directive 2003/35/EC and repealing Directive 2001/81/E. Official Journal of the European Union 344/1–344/31. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016L2284>

Glime J.M. 217. Bryophyte Ecology. Volume 1. Physiological Ecology. Ebook, Michigan Technological University. Available at <https://digitalcommons.mtu.edu/oabooks/4/>

Grodzińska K. 1979. Tree bark – sensitive biotest for environment acidification. Environment International 2(3): 173–176. [https://doi.org/10.1016/0160-4120\(79\)90075-8](https://doi.org/10.1016/0160-4120(79)90075-8)

Harmens H., Schnyder E., Thöni L., Cooper D.M., Mills G., Leblond S., Mohr K., Poiklolainen J., Santamaria J., Skudnik M., Zechmeister H.G., Lindroos A.J., Hanus-IIIinar A. 2014. Relationships between site-specific and nitrogen concentrations in mosses and measured wet bulk atmospheric nitrogen deposition across Europe. Environmental Pollution 194: 50–59. <https://doi.org/10.1016/j.envpol.2014.07.016>

Hayes F., Mills G., Harmens H., Novak K., Williams P. 2006. ICP Vegetation experimental protocol for monitoring the incidences of ozone injury on vegetation. Natural Environment Research Council, 28pp. Available from [icpvegetation.ceh.ac.uk](http://icpvegetation.ceh.ac.uk). <http://icpvegetation.ceh.ac.uk>

Heggestad H.E. 1966 Ozone as a Tobacco Toxicant. Journal of the Air Pollution Control Association 16(12): 691-694. <https://doi.org/10.1080/00022470.1966.10468534>

Hellawell J.M. (Ed.) 1986 Biological Indicators of Freshwater Pollution and Environmental Management. Elsevier, Science Applied Science, 546 pp.

Hůnová I., Maznová J., Kurfürst P. 2014. Trends in atmospheric deposition fluxes of sulphur and nitrogen in Czech forests. Environmental Pollution 184: 668–675. <https://doi.org/10.1016/j.envpol.2013.05.013>

Jacobson J.S., Hill A.C. 1970. Recognition of Air Pollution Injury to Vegetation: a Pictorial Atlas. Air Pollution Control Association TR-7, Agricultural Committee, Pittsburgh 102 pp.

Jaffe L.S. 1967. Effects of Photochemical Air Pollution on Vegetation with Relation to the Air Quality Requirements. Journal of the Air Pollution Control Association 17(1): 38–42. <https://doi.org/10.1080/00022470.1967.10468941>

Jamil K. (Ed.) 2001. Bioindicators and Biomarkers of Environmental Pollution and Risk Assessment. Science Publisher Inc., Enfield, NH, 204 pp.

Jeffrey D.W., Madden B. (Eds.) 1991. Bioindicators and Environmental Management. 1st Ed., Academic Press, London – Toronto, 458 pp.

Jochheim H., Lütschwager D., Riek W. 2022. Stem distance as an explanatory variable for the spatial distribution and chemical conditions of stand precipitation and soil solution under beech (*Fagus sylvatica* L.) trees. *Journal of Hydrology* 608: 127629. <https://doi.org/10.1016/j.jhydrol.2022.127629>

Klumpp A., Ansel W., Klumpp G., Belluzzo N., Calatayud V., Chaplin N., Garrec J.P., Gutsche H.-J., Hayes M., Hentze H.-W., Kambezidis H., Laurent O., Peñuelas J., Rasmussen S., Ribas A., Ro-Poulsen H., Rossi S., Sanz M.J., Shang H., Sifakis N., Vergne P. 2002. EuroBionet: A Pan-European Biomonitoring Network for Urban Air Quality Assessment. *Environmental Science and Pollution Research* 9(3): 199–203. <https://doi.org/10.1007/BF02987489>

Klumpp G., Ansel W., Klumpp G. (Eds.) 2004. *Urban Air Pollution, Bioindication and Environmental Awareness*. Cuvillier Verlag, Göttingen, 400 pp.

LeBlanc F., De Sloover J. 1970. Relation between industrialization and the distribution and growth of epiphytic lichens and mosses in Montreal. *Canadian Journal of Botany* 48(8): 1485–1495. <https://doi.org/10.1139/b70-224>

Li X-F., Ullch S., Chen N., Tong X., Yang A., Liu J., Guo X-O., Tang Z.G. 2023. Phytotoxicity assessment of dandelion exposed to microplastics using memberships function value and integrated biological response index. *Environmental Pollution* 333: 121933. <https://doi.org/10.1016/j.envpol.2023.121933>

Likens G.E., Bormann F.H., Johnson N.M. 1972. Acid Rain. *Environment: Science and Policy for Sustainable Development* 14(2): 33–40. <https://doi.org/10.1080/00139157.1972.9933001>

Manning W.J., Feder W.A. 1980. *Biomonitoring Air Pollutants with Plants*. Applied Science Publishers, London, 141 pp.

Markert B. (Ed.) 1993. *Plants as Biomonitor: Indicators for heavy Metals in the terrestrial environment*. VCH Verlagsgesellschaft mbH, Weinheim–Cambridge, 644 pp.

Markert B.A., Breure A.M., Zechmeister H.G. (Eds.) 2004. *Bioindicators and Biomonitor: Principles, Concepts and Applications*. Elsevier, Amsterdam –Tokyo 997 pp.

Moldan B, Hak T. 2011. Central European Environmental History and the EU Accession, *Environmental Science and Technology* 45(9): 3823–3828. <https://doi.org/10.1021/es1037436>

Mosley S. 2009. ‘A network of trust’: Measuring and monitoring air pollution in British cities, 1912–1960. *Environment and History*. 15 (3): 273–302. <https://doi.org/10.3197/096734009X1247473813107>

Nylander M.W., 1866. Les lichens du Jardin du Luxembourg. *Bulletin de la Société botanique de France* 13: 364–372.

Panda D. 2021. Fluoride toxicity stress: physiological and biochemical consequences on plants. *International Journal of Bio-resources, Environment and Agricultural Sciences* 1(1): 70–84. Available at [https://www.researchgate.net/publication/352372511\\_Fluoride\\_toxicity\\_stress\\_physiological\\_and\\_biochemical\\_consequences\\_on\\_plants](https://www.researchgate.net/publication/352372511_Fluoride_toxicity_stress_physiological_and_biochemical_consequences_on_plants)

Rillig M.C., Lehmann A., de Souza Machado A.A., Yang G. 2019. Microplastic Effects on Plants. *New Phytologist* 223(3): 1066–1070. <https://doi.org/10.1111/nph.15794>

Röhling Å., Tyler G. 1968. An ecological approach to the lead problem. *Botaniska Notiser* 22: 248–259.

Sigee D.C., Bellinger E.G. (Eds.) 2015. *Freshwater Algae: Identification, Enumeration and Use as Bioindicators*, 2nd Edition. Wiley-Blackwel, 304 pp.

Skalka M. 2004. Lišejníky jako bioindikátory. Živa 2004(52/3): 107–108.

Steubing L., Jäger H.-J., 1982. Monitoring of Air Pollutants by Plants: Methods and Problems. Dr. W. Junk Publishers, The Hague 164 pp.

Suchara I., Sucharová J. 1998a. Mechrosty a monitorování (I). Živa 1998(46): 201–202.

Suchara I., Sucharová J. 1998b. Mechrosty a monitorování (II). Živa 1998(46): 246–248.

Svoboda D. 2004. Český kras – stanovené úrovně znečištění prostředí pomocí lišejníků. Živa 2004(52/3): 109–111.

Van der Wat L., Forbes P.B.C. 2015. Lichens as biomonitor for organic air pollutants, TrAC Trends in Analytical Chemistry 64: 165–176. <https://doi.org/10.1016/j.trac.2014.09.006>

Varela Z., Boquete M.T., Fernández J.A., Martínez-Abaigar J., Núñez-Olivera E., Aboal J.R. 2023. Mythbusters: Unravelling the pollutant uptake processes in mosses for air quality monitoring. Ecological Indicators 1418 110095. <https://doi.org/10.1016/j.ecolind.2023.110095>

VDI 2000. VDI 3957 Blatt 2. Biologische Messverfahren zur Ermittlung und Beurteilung der Wirkung von Luftverunreinigungen auf Pflanzen (Biomonitoring) - Verfahren der standardisierten Graskultur. VDI Verein Deutscher Ingenieure, Beuth, Berlin

Yang J., Oh S.O., Hur J.S. 2023. Lichen as Bioindicators: Assessing their Response to Heavy Metal Pollution in their Native Ecosystem. Mycobiology 51(5): 343-353. <https://doi.org/10.1080/12298093.2023.2265144>