of *Zea mays* L. - J. Plant Physiol. **115**: 19-28, 1984.
Küpper, H., Lombi, E., Zhao, F.J., Wieshammer, G., McGrath, S.P.: Cellular compartmentation of nickel in the hyperaccumulators *Alyssum lesbiacum, Alyssum bertolonii* and *Thlaspi goesingense.* - J. exp. Bot. **52**: 2291-2300, 2001.
Lignell, Å., Roomans, G.M., Pedersén, M.: Localization of absorbed cadmium in *Fucus vesiculosus* L. by X-ray microanalysis. - Z. Pflanzenphysiol. **105**: 103-109, 1982.
Liu, D.H., Jiang, W.S., Gao, X.Z.: Effects of cadmium on root growth, cell division and nucleoli in root tip cells of garlic. - Biol. Plant. **47**: 79-83, 2003.
Liu, D.H., Jiang, W.S., Li, M.X.: Effects of Cd^{2+} on root growth and cell division of *Allium cepa*. - Acta Sci. Circumstantiae **12**: 439-446, 1992.
Liu, D.H., Kottke, I.: Subcellular localization of Cd in the root cells of *Allium sativum* by electron energy loss spectroscopy. - J. Biosci. **28**: 471-478, 2003.
Liu, D. H., Kottke, I.: Subcellular localization of Cd in the root cells of *Allium cepa* by electron energy loss spectroscopy and cytochemistry. - J. Biosci. **29**: 329-335. 2004.
Rauser, W.E.: Structure and function of metal chelators produced by plants. - Cell Biochem. Biophys. **31**: 19-48, 1999.
Rauser, W.E., Ackerley, C.A.: Localization of cadmium in granules within differentiating and mature root cells. - Can. J. Bot. **65**: 643-646, 1987.
Sanità di Toppi, L., Gabbrielli, R.: Response to cadmium in higher plants. - Environ. exp. Bot. **41**: 105-130, 1999.
Shah, K., Dubey, R.S.: Effect of cadmium on RNA level as well as activity and molecular forms of ribonuclease in growing rice seedlings. - Plant Physiol. Biochem. **33**: 577-584, 1995.
Stephan, U.W., Prochazka, Z.: Physiological disorders of the nicotianamine-auxotroph tomato mutant *chloronerva* at different levels of iron nutrition. I. Growth characteristics and physiological abnormalities as related to iron and nicotianamine supply. - Acta bot. neerl. **38**: 147-153, 1989.
Tsezos, M., Remoudaki, E., Angelatou, V.: Biosorption sites of selected metals using electron microscopy. - Biochem. Physiol. **118A**: 481-487, 1997.
Vázquez, M.D., Barceló, J., Poschenrieder, C.: Location of cadmium in young bush bean roots. - In: Vogeli-Lange, R., Wagner, G.J. (ed.): International Conference on Heavy Metals in the Environment. Pp. 115-118. CEP Consultants, Edinburgh 1991.
Vázquez, M.D., Barceló, J., Poschenrieder, C., Mácico, J., Hatton, P., Baker, A.J.M., Cope, G.H.: Localization of zinc and cadmium in *Thlaspi caerulescens* (Brassicaceae), a metallophyte that can hyperaccumulate both metals. - J. Plant Physiol. **140**: 350-355, 1992a.
Vázquez, M.D., Poschenrieder, C., Barceló, J.: Ultrastructural effects and localization of low cadmium concentrations in bean roots. - New Phytol. **120**: 215-226, 1992b.
White, C., Gadd, G.M.: Copper accumulation by sulfate-reducing bacterial biofilms. - FEMS Microbiol. Lett. **183**: 313-318. 2000.

Schekman, R., Goldstein, L., Rossant, J. (ed.): **Annual Review of Cell and Developmental Biology. Volume 22. -** Annual Reviews Inc., Palo Alto 2006. 795 pp. ISBN 0-8243-3122-2.

The introductory chapter "From nuclear transfer to nuclear reprogramming: the reversal of cell diffe-rentiation" is written by John B. Gordon, one of the great developmental biologist of our time. Readers of Biologia Plantarum will find especially interesting the reviews: "Cellulose synthesis in higher plants" (C. Somerville) and "*Agrobacterium tumefaciens* and plant cell interactions and activities for interkingdom macromolecular transfer" (C.A. McCullen and A.N. Binns). Other topics covered include: "Voltage induced channel activation", "Mitochondrial dynamics", "Sterol transport and esteri-fication", "Protein modification by Ubls", "Endocytosis and *Drosophila* development", "Tight junctions and cell polarity", "Germ cell migration", "Neural crest stem and progenitor cells", "Tissue architecture regulated development, homeostasis and cancer", "Pancreatic β-cell growth proliferation", "Epidermal stem cell of the skin", "GAG modifications shape of animal development", "TLR recognition and signaling", "TGN-to-plasma-membrane transport carriers", "Iron-sulfur protein biogenes", "Unfolded protein response", "Cellular basis of kidney development", "Telemores: cancer to human aging", "Interferon-inducible GTPase", "Extracellular matrix function", "Cell death in *Drosophila*", "Commissural axon pathfinding", "Evaluation of blood cell development", and "Axonal wiring in the mouse olfactory system".

All reviews , written by the foremost experts in the field, include extensive references to the literature and are written in such a way, as to be valuable both to advanced students and scientist. Annual Review of Cell and Developmental Biology as well as other Annual Reviews are available online (www.annualreviews.org). Current individual subscriptions include online access to full-text articles, PDFs, reviews in advance, bibliographies, and other supplementary material in the current volume and the prior 4 years' volumes.

T. GICHNER (*Praha*)