

1. Environmental analysis

1.1 Immunoanalysis

Recombinant antibodies

298. Kramer, K., Hock, B. (2007): Recombinant antibodies for agrochemicals: evolutionary optimization. In: Rational Methods for the Selection and Use of Agrochemicals. I.R. Kennedy, K. Solomon, S. Gee, und A. Crossan (Hrsg.). ACS Symposium Series No. 966.
279. Kramer, K., Hock, B. (2003): Recombinant antibodies for environmental analysis. *Analytical and Bioanalytical and Bioanalytical Biochemistry* 377, 417-426.
278. Kramer, K., Rau, D., Hock, B. (2003): Comparison of affinity ranking and immunochemical key data as measure for molecular antibody evolution. *Spectroscopy* 17, 355-365.
261. Hock, B., Seifert, M., Kramer, K. (2002): Engineering receptors and antibodies for biosensors. *Biosensors & Bioelectronics* 17, 239-249.
260. Rau, D., Kramer, K., Hock, B. (2002): Cloning functional expression and kinetic characterization of pesticide-selective Fab fragment variants derived by molecular evolution of variable antibody genes. *Anal. Bioanal. Chem.* 372: 261-267.
259. Rau, D., Kramer, K., Hock, B. (2002): Single-chain Fv antibody-alkaline phosphatase fusion proteins produced by one-step cloning as rapid detection tools for ELISA. *J Immunoassay Immunochem.* 23:129-143.
257. Kramer, K., Fiedler, M., Skerra, A. and Hock, B. (2002): A generic strategy for subcloning antibody variable regions from pCANTAB 5 E into pASK85 permits the economic production of Fab fragments and leads to improved recombinant protein stability. *Biosen. Bioelect.* 17, 305-313.
204. Piehler, J., Brecht, A., Giersch, T., Kramer, K., Hock, B., Gauglitz, G. (1997): Affinity characterization of monoclonal and recombinant antibodies for multianalyte detection with an optical transducer. *Sensors and Actuators B* 38-39, 432-437.
203. Piehler, J., Brecht, A., Giersch, T., Hock, B., Gauglitz, G. (1997): Assessment of affinity constants by rapid solid phase detection of equilibrium binding in a flow system. *Journal of Immunological Methods* 201, 189-206.
201. Pullen, S., Haiber, G., Schöler, H.F., Hock, B. (1997): Evaluierung eines immunchemischen PCB-Testkits für Bodenproben und Vergleich mit gaschromatographischer Analyse. *GIT Labor-Fachzeitschrift*, 41, 601-608.
200. Rigo, A. and Hock, B. (1997): On-line analysis with immunosensing devices. *GIT Laboratory Journal*, 1, 22-24.

191. Kramer, K., Hock, B. (1996): Recombinant single-chain antibodies against s-triazines. *Food & Agricultural Immunology* 2, 97-109.
188. Kramer, K., Hock, B. (1996): Recombinant antibodies for pesticide immunoanalysis. In: *Immunoassays for residue analysis. Food safety* (R.C. Beier and L.H. Stanker, eds.). ACS Symposium Ser. American Chemical Society, Washington, DC, S. 471-484.
170. Kramer, K., Hock, B. (1995): Rekombinante Antikörper in der Umweltanalytik. *Lebensmittel & Biotechnologie* 12, 49-56.

Monoclonal antibodies

291. Kaware, M., Bronshtein, A., Safi, J., Van Emon, J., Chuang, J. C., Hock, B., Kramer, K., Altstein, M. (2006): Enzyme-Linked Immunosorbent Assay (Elisa) and Sol-Gel-Based Immunoaffinity Purification (IAP) of the Pyrethroid Bioallethrin in Food and Environmental Samples. *J. Agric. Food Chem.* 54, 6482-6492.
281. Lotierzo, M., Henry, O.Y.F., Piletsky, S., Tothill, I., Cullen, D., Kania, M., Hock, B., Turner, A.P.F. (2004): Surface plasmon resonance sensor for domoic acid based on grafted imprinted polymer. *Biosensors and Bioelectronics* 1322, 1-8.
272. Lausterer, R., Sanvicens, N., Marco, M.P., Hock, B. (2003): Enzyme immunoassay for 2,4,6-trichloroanisole based on monoclonal antibodies. *Analyt. Lett.* 36, 4, 713-729.
265. Hock, B. (2002): Fortschritte in der immunchemischen Analytik von gewässerrelevanten Schadstoffen. *Acta Hydrochim. Hydrobiol.* 29, 375-390.
264. Kania, M., Hock, B. (2002): Development of monoclonal antibodies to domoic acid for the detection of domoic acid in blue mussel (*Mytilus edulis*) tissue by ELISA. *Analytical Letters* 35, 855-868.
258. Dankwardt, A., Hock, B. (2001): Immunolocalization of non-extractable bound) residues of pesticides and industrial contaminants in plants and soil. *Chemosphere*, 45, p. 523-533.
256. Marx, A., Sherry, J., Hansen, P.-D., Hock, B. (2001): A new monoclonal antibody against vitellogenin from rainbow trout (*Oncorhynchus mykiss*). *Chemosphere*, 44, p. 393-399.
255. Kramer, K., Lepschy, J., Hock, B. (2001): Long-Term Monitoring of Atrazine Contamination in Soil by ELISA. *Journal of AOAC International* 84, 150-155.
251. Marx, A., Hock, B. (2000): Monoclonal antibody-based enzyme immunoassay for mercury(II) determination. *Methods* 22, 49-52.
245. Hock, B. (2000): Immunoassays. In: Bilitewski, U. and Turner, A. (ed.) *Biosensors for Environmental Monitoring*, p. 105 - 124. Harwood academic publishers, The Netherlands.

233. Hock, B.(1999): Biosensoren für die Umweltanalytik. In: Spektrum der Wissenschaft 02, 39-40.
230. Hock, B.: Antikörper als Werkzeuge der Biotechnologie. p. 75-87 (1998): In: Die neue Biotechnologie - Chancen für Deutschland. (H. Schnabl, Hrsg.), Bouvier Verlag Bonn.
227. Scutaru, B., Giersch, T., Cozmei, C., Hock, B. (1998): Immuno enzymatic determination of atrazine in rat tissue samples. Toxicology 127, 11-16.
226. Marx, A., Krötz, E., Hock, B. (1998): Improvement of an enzyme immunoassay for the determination of mercury (II). Analytical Letters 31, 1651-1661.
225. Marx, A., Hock, B. (1998): Characterization of a new monoclonal antibody against mercury (II). Analytical Letters 31, 1633-1650.
224. Sasaki, S., Nagata, R. Hock, B., Karube, I. (1998): Novel surface plasmon resonancance sensor chip functionalized with organic silica compounds for antibody attachment. Analytica Chimica Acta 368, 71-76.
218. Schipper, E.F., Rauchalles, S., Kooyman, R.P.H., Hock, B., Greve, J. (1998): The waveguide machzender interferometer as atrazine sensor. Analytical Chemistry, 6, 1192-1197.
216. Dankwardt, A., Müller, J., Hock, B. (1998): Stabilization of enzyme immunoassays for atrazine. Analytica Chimica Acta 362, 35-45.
213. Vianello, F., Signor, L., Pizzariello, A., Di Paolo, M.L., Scarpa, M., Hock, B., Giersch, T. and Rigo, A. (1998): Continuous flow immunosensor for atrazine detection. Biosensors & Bioelctronics 1, 45-53.
212. Obst, U., Bilitewski, U. und Hock, B. (1998): Anwendung immunchemischer Methoden in der Wasseranalytik. S. 251-309. Hrsg.: Günzler, H., Bahadir, A. M., Danzer, K., Fresenius, W., Galensa, R., Huber, W., Linscheid, M., Schwedt, G., Tölg, G. In: Analytiker-Taschenbuch, Bd. 18. Springer-Verlag Berlin, Heidelberg.
209. Dankwardt, A., Pullen, S. and Hock, B.(1998): Immunoassays: Applications for the aquatic environment. Eds.: Wells, P., Lee, K. and Blaise, C. In: Microscale Testing in Aquatic Toxicology. P. 13-29. CRC Press LLC, Boca Raton, Florida.
208. Dankwardt, A. and Hock, B. (1997): Enzyme immunoassays for analysis of pesticides in water and food. Food technol. biotechnol. 35, 165-174.
207. Hock, B. and Immunoassay Study Group (1997): Standardization of immunoassays for water and soil analysis. Eds.: Meyer, M.T. and Thurman, E.M., ACS. In: Herbicide Metabolites in Surf 630, 53-62.
206. Hock, B. (1997): Antibodies for immunosensors. A review. Analytica Chimica Acta 347, 177-186.
185. Hock, B. (1996): Immunchemische Meßverfahren. In: DFG Gewässergütekriterien, Senatskommission für Wasserforschung, Mitteilung 13, VCH Verlagsgesellschaft mbH Weinheim, S. 75-90.

180. Hock, B., Giersch, T., Kramer, K., Dankwardt, A. (1995): Antibody production and progress in hybridoma technology by immunomagnetic screening. In: *New Frontiers in Agrochemical Immunoassay* (D.A. Kurtz, J.H. Skerritt, L. Stanker; eds.), AOAC International, Arlington, USA, S. 149-162.
179. Hock, B., Dankwardt, A., Kramer, K., Marx, A. (1995): Immunochemical techniques: antibody production for pesticide analysis. A review. *Analytica Chimica Acta*, 311, 393-405.
178. Dankwardt, A., Hock, B. (1995): Bestimmung gebundener Triazinrückstände im Boden mit immunchemischen Methoden. *GIT Fachz. Lab.* 8, 721-722.
175. Guilbault, G. G., Hock, B. (1995): The quartz crystal microbalance as biosensor. A status report on its future. *Analytical Letters*, 28(5), 749-764.
172. Pullen, S., Hock, B. (1995): Development of enzyme immunoassays for the detection of pyrethroid insecticides. Monoclonal antibodies for allethrin. *Analytical Letters* 28,(5), 765-779.
171. Jiang, T.J., Halsall, H.B., Heinemann, W.R., Giersch, T., Hock, B. (1995): Capillary Enzyme immunoassay with electrochemical detection for the determination of atrazine in water. *J. Agric. Food Chem.* 43(4), 1098-1104.
167. Dankwardt, A., Pullen, S., Rauchalles, S., Kramer, K., Just, F., Hock, B. (1995): Atrazine residues in soil two years after the atrazine ban a comparison of enzyme immunoassay with HPLC. *Analytical Letters*, 28(4), 621-634.
166. Wittmann, C., Schmid, R.D., Hock, B. (1995): Immunosensors for pesticides in the aquatic environment. In: D. Barceló, G. Angeletti, G. T. Amanatidis (eds.): *Environmental Analysis of Pesticides and their Conversion Products in the Aquatic Environment*. Water Pollution Research Report 31. Barcelona, 20-21 June 1994, European Commission, EUR 15940 EN, S. 107-110.
165. Marx, A., Giersch, T., Hock, B. (1995): Immunoaffinity chromatography of s-Triazines. *Analytical Letters*, 28, (2) 267-278.
164. Hock, B. (1995): Neuere Entwicklungen auf dem Gebiet der immunochemischen Methoden zur Gewässerüberwachung. In: *Möglichkeiten und Grenzen in der Emissionsüberwachung von Einleitern und Immissionsüberwachung am Gewässer*. 35. Symposium der UTECH Berlin. Umwelttechnologieforum 1995, S. 159-171.
162. Hock, B., Giersch, T., Dankwardt, A., Kramer, K., Pullen, S. (1994): Toxicity assessment and on-line monitoring: Immunoassays. *Environmental Toxicology and Water Quality* 9(4), 243-262.
161. Dankwardt, A., Wüst, S., Elling, W., Thurman, E.M., Hock, B. (1994): Determination of atrazine in rainfall and surface water by enzyme immunoassay. *ESPR- Environ. Sci.& Pollut. Res.* 1(4), 196-204.
157. Kramer, K., Giersch, T., Hock, B. (1994): Magnetic bead selection of hybridomas producing pesticide antibodies. *Food & Agric. Immunol.* 6, 5-16.

148. Giersch, T., Kramer, K., Weller, M.G., Hock, B. (1993): Improvement of a monoclonal antibody-based immunoassay for the determination of Terbutryn. *Acta Hydrochim. Hydrobiol.* 21, 312-315.
145. Giersch, T., Sohn, G., Hock, B. (1993): Monoclonal antibody-based immunolocalisation of bound triazine residues in two aquatic macrophytes (*Elodea canadensis* and *Myriophyllum spicatum*). *Analytical Letters* 26, 1831-1845.
138. Giersch, T., Kramer, K., Hock, B. (1993): Optimization of a monoclonal antibody based enzyme immunoassay for the detection of terbuthylazine. *The Science of the Total Environment* 132, 435-448.
131. Giersch, T., Kramer, K., Hock, B. (1992): Optimization of a monoclonal antibody based enzyme immunoassay for the detection of terbuthylazine. *The Science of the Total Environment*. Elsevier Science Publishers B.V. Amsterdam.
130. Hock, B., Giersch, T., Kramer, K. (1992): Immunoassays for environmental analysis. *Analisis Magazine* Vol. 20, No 8, M29-M33.
129. Guilbault, G., Hock, B., Schmid, R. (1992): A piezoelectric immunobiosensor for atrazine in drinking water. *Biosensors & Bioelectronics* 7, 411-419.
106. Giersch, T., Hock, B. (1990): Production of monoclonal antibodies for the determination of s-triazines with enzyme immunoassays. *Food & Agricult. Immunol.* 2, 85-97.

Polyclonal antibodies

273. Kania, M., Kreuzer, M., Moore, E., Pravda, M., Hock, B., Guilbault, G. (2003): Development of polyclonal antibodies against domoic acid for their use in electrochemical biosensors. *Analyt. Lett.* 36, 9, 1851-1863.
270. Maqbool, U., Anwar-ul-Haq, Qureshi, M.J., Iqbal, M.Z., Kramer, K., Hock, B. (2002): Development of ELISA technique for the analysis of atrazine residues in water. *J. Environ. Sci. Health* 37, Part B, 307-322.
263. Müller-Starck, R., Kania, M., Dankwardt, A., Hock, B. (2002): Serological characterization of refractory organic substances by serotyping, p. 282 - 301. In: Frimmel, F.H., Abbt-Braun, G., Heumann, K.G., Hock, B., Lüdemann, H.-D., Spiteller, M. (ed.): *Refractory organic substances in the environment*. Wiley-VCH Verlag GmbH Weinheim.
247. Dankwardt, A., Hock, B. (2000): Inhibition of endogenous peroxidase activity in soil samples. Application to the analysis of soilbound triazine residues by enzyme immunoassays with peroxidase tracer. *J. Plant Nutr. Soil Sci.* 163, 279-283. Wiley-VCH Verlag GmbH Weinheim.

222. Dankwardt, A., Freitag, D. and Hock, B., (1998): Approaches to the immunochemical analysis of non-extractable triazine residues in refractory organic substances (ROS) and characterization of ROS. *Acta hydrochim.hydrobiol.* 26, 145-151.
198. Dankwardt, A., Kramer, K., Simon, R., Freitag, D., Kettrup, A., Hock, B. (1997): Nonextractable pesticide residues in humic substances: immunochemical analysis. In: Aga, D.S., Thurman, E.M. (eds.) *Immunochemical technology for environmental applications*. American Chemical Society, Washington, D.C., p. 290-302.
195. Pullen, S., Haiber, G., Schöler, H.F., Hock, B. (1996): Evaluation of an immunochemical test kit for polychlorinated biphenyls in soils and comparison with gas chromatographic analysis. *Intern. J. Environ. Anal. Chem.* 65, p. 127-138.
196. Dankwardt, A., Thurman, E.M., Hock, B. (1997): Terbutylazine and deethylterbutylazine in rain and surface water - determination by enzyme immunoassay and gas chromatography/mass spectrometry. *Acta Hydrochim.Hydrobiol.*, 25, 5-10.
194. Dankwardt, A., Hock, B. (1996): Determination of non-extractable triazine residues by enzyme immunoassay: In vestigation of model compounds and soil fulvic and humic acids. *Environmental Science & Technology*, 30 (12), 3493-3500.
184. Eremin, S.A., Mel'nichenko, O.A., Kreissig, S. and Hock, B. (1995): Rapid immunochemical method for the determination of the herbicide methabenzthiazuron. *Journal of Analytical Chemistry*, 9, 888-895.
173. Pullen, S., Hock, B. (1995): Development of enzyme immunoassays for the detection of pyrethroid insecticides. Polyclonal antibodies for pyrethroid insecticides. *Analytical Letters* 28(5), 781-795.
156. Wittmann, C. and Hock, B. (1994): Development of an enzyme immunoassay for the analysis of the atrazine metabolite hydroxyatrazine. *Acta Hydrochim. Hydrobiol.* 22, 60-69.
155. Schewes, R., Wüst, S., Lepschy-v.Gleissenthall, J., Maidl, F.X., Süß, A., Hock, B., Fischbeck, G. (1994): Determination of weathered atrazine residues in soil by enzyme immunoassay and HPLC: An evaluation study. *Analytical Letters* 27 (3), 487-494.
152. Dankwardt, A., Hock, B. (1993): Rapid immunofiltration assay for the determination of atrazine in water and soil samples. *Biosensors & Bioelectronics* Vol. 8, No. 7/8, 20-21.
151. Staimer, N., Bürcky, K., Steinle, G., Hock, B. (1994): Determination of atrazine residues in electroultrafiltration soil extracts by a sensitive enzyme immunoassay. *Z. Pflanzenern. Bodenk.* 157, 41-46.
146. Wittmann, C., Hock, B. (1993): Application and performance characteristics of a novel ELISA for the quantitative analysis of the atrazine metabolite deethylatrazine. *J. Agr. Food. Chem.* 41, 1795-1799.

144. Dankwardt, A., Hock, B. (1993): Immunchemischer Schnelltest zum Nachweis von Atrazin in Wasserproben und Bodenextrakten. GIT Fachz. Lab. 10, 839-844.
143. Wittmann, C., Hock, B. (1993): Analysis of atrazine residues in food by an enzyme immunoassay. J. Agr. Food. Chem. 41, 1421-1425.
141. Dankwardt, A., Seifert, J., Hock, B. (1993): Magnetpartikel Enzymimmunoassay als schnelle Screening-Methode zur Bestimmung von Atrazin in Umweltproben. Acta hydrochim. hydrobiol. 21, 2, 110-113.
140. Hock, B. (1992): Verwendung von Enzymimmunoassays zur Bestimmung von Pflanzenschutzmitteln im Rahmen der Trinkwasserverordnung. Schr.-Reihe Verein WaBoLu 89, Gustav-Fischer Verlag, Stuttgart, S. 771-784.
139. Hock, B. (1993): Enzyme immunoassays for pesticide analysis. Acta hydrochim. hydrobiol. 21, 2, 71-83.
135. Kreißig, S., Hock, B. (1993): Entwicklung und Anwendung eines Enzymimmunoassays zur Bestimmung von Methabenzthiazuron. Fachgruppe Wasserchemie in der GDCh (Eds.) VCH Verlagsges. mbH, Weinheim, New York, Basel, Cambridge, S. 83-93.
134. Hock, B. (1992): Enzyme immunoassays in water analysis. Fresenius J. Anal. Chem. 343, 8.
132. Wengatz, I., Schmid, R.D., Kreißig, S., Wittmann, C., Hock, B., Ingendoh, A., Hillenkamp F. (1992): Determination of the hapten density of immunoconjugates by matrix-assisted UV laser desorption/ionization mass spectrometry. Analytical Letters 25 (11), 1983-1997.
128. Wüst, S., Hock, B. (1992): A sensitive enzyme immunoassay for the detection of atrazine based upon sheep antibodies. Analytical letters 25, 1025-1037.
105. Wittmann, C., Hock, B. (1990): Evaluation and performance characteristics of a novel ELISA for the quantitative analysis of atrazine in water, plants and soil. Food & Agricult. Immunol. 2, 65-74.
104. Immunoassay Study Group (1990): (P.-D. Hansen; B. Hock; R. Kanne; A. Krotzky; U. Obst; U. Oehmichen; C. Schlett; R. Schmid; L. Weil): Application of enzyme immunoassay for the determination of s-triazines in water samples: Interlaboratory tests from 13 laboratories. DECHEMA, Annual Meeting of Biotechnologists 28-30. 1991 in Frankfurt/M., Vol. 4, 31-45.
103. Wittmann, C., Hock, B. (1990): ELISAs zur Bestimmung von Atrazin und Atrazin-Metaboliten in Wasser. Vom Wasser, 75, 115-126.
102. Sohn, G., C. Sautter, C., B. Hock, B. (1990): Fluorescence immunolocalization of bound atrazine residues in plant tissue. Planta 181, 199-203.
101. Wüst, S., Doht, U., Giersch, T., Wittmann, C., Hock, B. (1990): Sensitiver s-Triazin- Enzymimmunoassay für Wasserproben in Polystyrol-Röhrchen. GIT Fachz. Lab. 2, 99-106.

100. Wittmann, C., Hock, B. (1989): Improved enzyme immunoassay for the analysis of s-triazines in water samples. *Food & Agricult. Immunol.* 1, 211-224.
126. Plomer, M., Guilbault, G., Hock, B. (1992): Development of piezoelectric immunosensor for the detection of enterobacteria. *Enzyme Microb. Technol.* 14, 230-235.
125. Hock, B., Liebmann, S., Beyrle, H., Dressel, K. (1991): Phytohormone analysis by enzyme immunoassays. In: *Methods in Microbiol.* Vol. 24, Academic Press, London, San Diego, New York, Boston, Sydney, Tokyo, Toronto, S. 249-273.
124. Schneider, P., Horn, K., Lauterbach, R., Hock, B. (1991): Quantitative determination of the gibberellins GA3 und GA1 in spruce (*Picea abies* [L.] needles by a highly specific enzyme immunoassay. *J. Plant Physiol.* 139, 229-234.
122. Wittmann, C., Hock, B. (1991): Immunoassays zum Nachweis von Pestiziden und Umweltchemikalien. *Nachr. Chem. Techn. Lab.* 39, M1-M40.
121. Kreißig, S., Hock, B. (1991): An enzyme immunoassay for the determination of methabenzthiazuron. *Analyt. Letters* 24, 1729-1739.
117. Wittmann, C., Hock, B. (1991): Development of an ELISA for the analysis of atrazine metabolites deethylatrazine and deisopropylatrazine. *J. Agric. Food. Chem.* 39, 1194-1200.
115. Hock Bertold together with the Immunoassay Study Group (P.-D. Hansen, B. Hock, R. Kanne, A. Krotzky, U. Obst, U. Oehmichen, C. Schlett, R. Schmid, L. Weil) (1991): Enzyme immunoassay for the determination of s-Triazines in water samples: Two interlaboratory Tests. *Analyt. Letters* 24, (4), 529-549.
114. Scholz, H.M., Hock, B. (1991): Development of an enzyme immunoassay for the determination of metazachlor. *Analyt. Letters* 24, (No. 3), 413-427.
113. Arbeitsgruppe Immunoassays für den Nachweis von Pestiziden (1991. P.- D. Hansen, B. Hock, R. Kanne, A. Krotzky, U. Obst, U. Oehmichen, C. Schlett, R. Schmid, L. Weil): Zweite Vergleichsuntersuchungen zur Bestimmung von s-Triazinen in Wasserproben. *Z. Wasser-Abwasser* 24, 65-70.
112. Arbeitsgruppe Immunoassays für den Nachweis von Pestiziden (1991). (P.-D. Hansen, B. Hock, R. Kanne, A. Krotzky, U. Obst, U. Oehmichen, C. Schlett, R. Schmid, L. Weil): Vergleichsuntersuchungen zur Bestimmung von s-Triazinen in Wasserproben. *Z. Wasser-Abwasser* 4, 228.
110. Kreißig, S., Hock, B. (1991): Entwicklung eines Enzymimmunoassays zur Bestimmung von Methabenzthiazuron. *Z. Wasser-Abwasser-Forsch.* 24, 10-12.
109. Scholz, H.M., Hock, B. (1991): Entwicklung eines Enzymimmunoassays zum Nachweis von Metazachlor. *Z. Wasser-Abwasser-Forsch.* 24, 29-31.
108. Wittmann, C., Hock, B. (1991): Enzyme-linked immunosorbent assay zur quantitativen Bestimmung von Atrazin und Atrazin-Metaboliten. *Z. Wasser-Abwasserforsch.* 24, 2-7.

107. Arbeitsgruppe Immunoassays für den Nachweis von Pestiziden (1991). (P.-D. Hansen, B. Hock, R. Kanne, A. Krotzky, U. Obst, U. Oehmichen, C. Schlett, R. Schmid, L. Weil): Anwendung von Enzymimmunoassays zur Bestimmung von s-Triazinen in Wasserproben: Vergleichsuntersuchungen von 13 Laboratorien. Z. Wasser-Abwasser-Forsch. 24, 20-25.
95. Schneider, P., Horn, K., Lauterbach, R., Hock, B. (1989): Influence of ozone and acid mist on the contents of gibberellic acid (GA3) in spruce needles (*Picea abies* (L.) Karst.). Environm. Poll. 64, 347-351.
93. Hock, B. (1989): Enzymimmunoassays zur Bestimmung von Pflanzenschutzmitteln im Wasser. Zeitschrift Wasser-und Abwasserforschung 22, 78-84.
68. Huber, S.J., Hock, B. (1986): Atrazin in water. In: Methods of Enzymatic Analysis, 3rd. Ed. Hrsg. H.U. Bergmeyer, Weinheim, VCH-Verlagsges., S. 438-451.
60. Huber, S.J., Hock, B. (1985): A solid phase enzyme immunoassay for the determination of herbicides from fresh water: Polystyrene spheres in comparison to microtiter plates as antibody carriers. GIT Fachz. Lab. 10, 969-977.
59. Huber, S. J., Hock, B. (1985): A solid phase enzyme immunoassay for the quantitative determination of the herbicide terbutryn. Z. Pflanzenkrankh. Pflanzenschutz 92, 147-156.

Enzymatic analysis

- Wolf, N. M., Morisseau, C., Jones, P. D., Hock, B., Hammock, B. D. (2006): Development of a high-throughput screen for soluble epoxide hydrolase inhibition. *Analyt. Biochem.* 355, 71 – 80
287. Jones, P. D., Wolf, N. M., Morisseau, C., Whetstone, P., Hock, B., Hammock, B. D. (2005): Fluorescent substrates for soluble epoxide hydrolase and application to inhibition studies. *Analytical Biochemistry* 343, 66-75.
276. Kamita, S.G., Hinton, A.C., Wheelock, C.E., Wogulis, M.D., Wilson, D.K., Wolf, N.M., Stok, J.E., Hock, B., Hammock, B.D. (2003): Juvenile hormone (JH) esterase: why are you so JH specific? *Insect Biochemistry and Molecular Biology* 33, 1261-1273.
64. McFadden, B.A., Hock, B. (1985): Proteinases and the instability of isocitrate lyase in extracts of developing flax seedlings. *Phytochem.* 24, 2847-2850.

1.2 Receptor assays, transcriptome analysis

Asawasinsopon, R., Prapamontol, T., Prakobvitayakit, O., Vaneesorn Y., Mangklabruks, A., Hock, B. (2007): Persistent organic pollutants in adult males, Mae sa Mai Village, Mae Rim district, Chiang Mai Province. In: Pesticides in Southeast Asia (P. Kunstadter ed.). Sanga Sabhasri Research Foundation, Silkworm Books.

290. Asawasinsopon, R., Prapamontol, T., Prakobvitayakit, O., Vaneesorn, Y., Mangklabruks, A., Hock, B. (2006): The association between organochlorine and thyroid hormone levels in cord serum: A study from northern Thailand. *Environmental International* 32, 554-559.

292. Wen, Li, Seifert, M. Ying, Xu, Hock, B. (2006): Assessment of estrogenic activity of leachate from automobile tires with two in vitro bioassays. *Fresenius Environmental Bulletin* 1, 74-79.

284. Asawasinsopon, R., Prapamontol, T., Prakobvitayakit, Y., Vaneesorn, Y., Mangklabruks, A., Hock, B. (2005): Plasma levels of DDT and their association with reproductive hormones in adult men from northern Thailand. *J. Sci. Of the Total Environ.* 355, 98 – 105.

280. Seifert, M., Li Wen, Alberti, M., Kausch, U., Hock, B. (2003): Biomonitoring: Integration of biological endpoints into chemical monitoring. *Pure Appl. Chem.* 75, 2451-2459.

285. Alberti, M., Kausch, U., Haindl, S., Leibiger, R., Budczies, J., Seifert, M., Hock, B. (2005): Gene expression patterns – a tool for bioanalysis. *Intern. J. Environ. Anal. Chem.* 85, 589-608.

273. Hock, B., Seifert, M. (2003): Biomonitoring, a new challenge for measuring and testing. *Management of Environmental Quality: An International Journal* 2, 279 – 292. 272.

271. Seifert, M., Kausch, U., Alberti, M., Haindl, S., Hock, B. (2003): Nutzung von Genexpressionsmustern für die Bioanalytik. *GIT Laborfachzeitschrift* 3, S. 236 – 238.

268. Hock, B., Seifert, M., (2002): Bioanalytik von Umweltschadstoffen. *Chemie in unserer Zeit* 36, 294 – 304.

266. Riffeser, M., Hock, B. (2002): Vitellogenin levels in mussel hemolymph – a suitable biomarker for the exposure to estrogens? *Comparative Biochemistry and Physiology Pt. C* 132, 75-84.

254. Hock, B., Kramer, K., Seifert, M. (2001): Environmental analysis using antibody and receptor based techniques. *Intern. J. Environ. Anal. Chem.* 78, p. 289-303.

246. Hock, B., Rothe, S., Seifert, M. (2000): Hormone in der Umwelt – die Tests im Überblick. In: *Nachrichten aus der Chemie* 48, 918-924.

243. Sherry, J., Gamble, A., Hodson, P., Solomon, K., Hock, B., Marx, A., Hansen, P. (1999): Vitellogenin Induction in Fish as an Indicator of Exposure to Environmental Estrogens. In: Rao, S.,S., (ed.) Impact Assessment of Hazardous Aquatic Contaminants, Concepts and Approaches. Lewis Publishers (CRC Press LLC), Boca Raton, London, New York, Washington, D.C.
240. Hock, B., Rahman, M., Rauchalles, S., Dankwardt, A., Seifert, M., Haindl, S., Kramer, K. (1999): Stabilisation of immunoassays and receptor assays. J. of Molecular Catalysis B: Enzymatic 7, 115-124.
236. Seifert, M., Haindl, S., Hock, B. (1999): Development of an enzyme linked receptor assay (ELRA) for estrogens and xenoestrogens. Analytica Chimica Acta 386, 191-199.
234. Seifert, M., Haindl, S., Hock, B. (1999): In Vitro analysis of xenoestrogens by enzyme linked receptor assays (elra). In: Reproductive Toxicology – Advances in Experimental Medicine and Biology, 444, p. 113-117, (Jesus del Mazo (Hrsg.), Plenum Press New York and London.
231. Hock, B., Seifert, M.(1998): Monitoring-Strategien für oestrogene Wirkstoffe. In: BIOforum 11, 690-696. GIT Verlag, Darmstadt.
223. Hansen, P.-D., Dizer, H., Hock, B., Marx, A., Sherry, McMaster, M., Blaise, Ch. (1998): Vitellogenin - a biomarker for endocrine disruptors. Trends in Analytical chemistry,17, 448-451.
217. Oosterkamp, A., Hock., B., Seifert, M., Irth, H. (1997): Novel monitoring strategies for xenoestrogens. Trends in Analytical Chemistry, 10, 544-553. Elsevier Science B.V. Niederlande.

1. 3 Bioresponse-linked instrumental analysis

295. Hock, B. (2006): Wirkungsbezogene Analytik in der Lebensmittelüberwachung. J. Verbr. Lebensm. 1, 269-270.
248. Bilitewski, U., Brenner-Weiß, G., Hansen, P.-D., Hock, B., Meulenberg, E., Müller, G., Obst, U., Sauerwein, H., Scheller, F.W., Schmid, R., Schnabl, H., Spener, F. (2000): Bioresponse-linkend instrumental analysis. Trends in analytical chemistry 19, (7), 428 – 433.
237. Seifert, M., Brenner-Weiß, G., Haindl, S., Nusser, M., Obst. U., Hock, B. (1999): A new concept for the bioeffects-related analysis of xenoestrogens: Hyphenation of receptor assays with LC-MS. Fresenius J. Anal. Chem. 363, 767-770.
229. Beimborn, D., Brand, G., Fischer, S., Flemming, H.-C., Grummt, T., Hansen, P.-D., Hock, B., Kanne, R., Kohler, H.- P., Ludwig, W., Obst, U., Reichert, S., Schmid, R.D., Scholz-Muramatsu, H., Steinberg, C., Zaborosch, C., Arbeitsgruppe Biochemische Arbeitsmethoden (1998): Wirkungsbezogene Umweltanalytik, Teil 2: Möglichkeiten und Perspektiven der wirkungsbezogenen Analytik. GIT Labor-Fachz.10, 1058-1062.

228. Beimborn, D., Flemming, H.-C., Grummt, T., Hansen, P.-D., Hock, B., Kanne, R., Kohler, H.- P., Ludwig, W., Obst, U., Schmid, R.D., Scholz-Muramatsu, H., Arbeitsgruppe Biochemische Arbeitsmethoden (1998): Wirkungsbezogene Umweltanalytik, Teil 1: Grenzen der chemischen und biologischen Analysenverfahren. GIT Labor-Fachz. 9, 905-908.

2. Space-related Research

Phagocytosis and respiratory burst

294. Huber, K., Kötz-Fahning, M., Hock, B. (2006): Respiratory burst as a biomarker for stress responses. *Protoplasma* 229, 221 – 224.

288. Huber, K., Krötz-Fahning, M. Hock, B. (2005): Phagocytosis as a biomarker for stress responses. *Journal of Gravitational Physiology* 12, 265-266.

Genotoxicity

241. Hahn, A., Hock, B. (1999): Assessment of DNA damage in filamentous fungi by single cell gel electrophoresis, comet assay. *Env. Tox. & Chem.* 18, 1421-1424.

238. Hahn, A., Hock, B. (1999): Chromosome mechanics of fungi under spaceflight conditions tetrad analysis of two factor crosses between spore color mutants of *Sordaria macrospora*. *FASEB J.* 13, 149-156.

Gravitropism

296. Hock, B., Häder, D-P. (2006): Gravitropism in fungi and slime molds. *Signal Transduction*, 6, 443-448.

219. Kern, V. D., Rehm, A., Hock, B. (1998): Gravitropic bending of fruiting bodies a model based on hyphal gravisensing and cooperativity. *Adv. Space Res.*, 8/9, 1173-1178.

205. Kern, V.D., Mendgen, K., Hock, B. (1997): *Flammulina* as a model system for fungal gravitropism. *Planta* 203, 23-32.

189. Kern, V. D., Hock, B. (1996): Gravitropismus bei Pilzen. *Naturwissenschaftliche Rundschau* 49, 5/1996, 174-180.

187. Moore, D., Hock, B., Greening, J.P., Kern, V., Novak-Frazer, L. and Monzer, J. (1996): Gravitropism in agarics. *Mycol. Res.* 100: 257-273.

174. Kern, V.D., Hock, B. (1995): Gravimorphogenesis and ultrastructure of the fungus *Flammulina velutipes* crown in space, on clinostats and under hyper-G conditions. *Adv. Space Res.*, 17(6/7), 183-186.
142. Kern, V., Hock, B. (1993): Fungi in space literature survey on fungi used for space research. *Microgravity Sci. Technol.* VI/3, 194-206.
123. Henkel, J., Hock, B. (1991): Clinostatic rotation decreases crossover frequencies in the fungus *Sordaria macrospora* Auersw. *Microgravity Sci. Technol.* 4,/4, 267-272.

3. Mycorrhiza

277. Geue, H., Hock, B. (2004): Determination of *Acaulospora longula* and *Glomus* subgroup a in plant roots from grassland using new primers against the large subunit ribosomal DNA. *Mycol. Res.* 108, 76-83. 849.
250. Hahn, A., Wright, S., Hock, B. (2001): Immunochemical characterization of mycorrhizal fungi, p. 29-43. In: *The Mycota IX. Fungal Associations*. Springer-Verlag Berlin Heidelberg.
211. Göbel, C., Hahn, A. and Hock, B. (1998): Monoclonal antibodies for the identification of arbuscular mycorrhizal fungi. P. 271-287. Ed.: Varma, A., Jawaharlal Nehru University New Delhi. In: *Mycorrhiza Manual (Springer Lab Manual)*, Springer Verlag Berlin, Heidelberg, New York.
210. Hahn, A., Göbel, C. and Hock, B. (1998): Polyclonal antibodies for the detection of arbuscular mycorrhizal fungi. P. 255-270. Ed.: Varma, A., Jawaharlal Nehru University New Delhi. In: *Mycorrhiza Manual (Springer Lab Manual)*, Springer Verlag Berlin, Heidelberg, New York.
193. Böhm, J., Hock, B. (1996): II. Mycorrhizae: Endomycorrhizae. *Progress in Botany*, 58. Springer-Verlag Berlin Heidelberg, S. 555-594.
192. Hahn, A., Kesavan, A., Narayanan, R., Wheeler, C.T., Hock, B. (1996): Monoclonal antibodies for strain recognition in *Frankia*. In: *The root microbiology of tropical nitrogen fixing trees in relation to nitrogen and phosphorus nutrition*. (Wheeler, C.T., Narayanan, R., Parthiban, K.T., Kesavan, A. and Surendran, C., eds.), p. 61-71.
190. Hock, B. (1996): Advances in immunochemical detection of microorganisms. *Ann. Biol. Clin.* 54, 243-252.
186. Hahn, A., Göbel, C., Hock, B. (1996): Monoclonal antibodies against hyphal surface antigens of arbuscular mycorrhizal fungi. In: *Mycorrhizas in integrated systems from genes to plant development*. Proceedings of the fourth European symposium on Mycorrhizas (C. Azcon-Aguilar, J.M. Barea, eds.). COST action 821, Office for Official Publications of the European Communities, Brussels, Luxemburg, S. 39-42.

182. Göbel, C., Hahn, A., Hock, B. (1995): Production of polyclonal and monoclonal antibodies against hyphae from arbuscular mycorrhizal fungi. *Critical Reviews in Biotechnology*, 15, 293-304.
181. Hock, B. (1995): Arbuscular mycorrhizas in sustainable soil-plant systems. COST ACTION 821, October 21-23,1994, Report of 1994 Activities. In: European Commission, Directorate-General XII, Science, Research and Development, (S. Gianinazzi, H Schuepp and J.P. Masson, eds.), Luxembourg.
160. Hahn, A., Hock, B. (1994): Immunochemical detection of arbuscular mycorrhiza. Birkhäuser Verlag Basel, S. 913-918.
158. Hahn, A., Gianinazzi-Pearson, V., Hock, B. (1994): Characterization of arbuscular mycorrhizal fungi by immunochemical methods. In: Impact of arbuscular mycorrhizas on sustainable agriculture and natural ecosystems. Gianinazzi, S., Schüepp, H. (eds.) Birkhäuser Verlag Basel., S. 25-39.
149. Hahn, A., Bonfante, P., Horn, K., Pausch, F., Hock, B. (1993): Production of monoclonal antibodies against surface antigens of spores from arbuscular mycorrhizal fungi by an improved immunization and screening procedure. *Mycorrhiza* 4, 69-78.
133. Horn, K., Hahn, A., Pausch, F., Hock, B. (1992): Isolation of pure spore and hyphal fractions from vesicular-arbuscular mycorrhizal fungi. *J. Plant Physiol.* 141, 28-32.
127. Hahn, A., Frimmel, F., Haisch, A., Henkelmann, G., Hock, B. (1992): Immunolabelling of atrazine residues in soil. *Z. Pflanzernähr. Bodenk.* 155, 203-208.
116. Beyrle, H., Penningsfeld, F., Hock, B. (1991): The role of nitrogen in determining the outcome of the interaction between *Dactylorhiza incarnata* (L.) Soó and *Rhizoctonia* sp. *New Phytol.* 117, 665-672.
97. Beyrle, H., Penningsfeld, F., Hock, B. (1989): Mykorrhiza-Synthese in gärtnerischen Kultursubstraten und in natürlichen Böden. *Die Orchidee* 40, 173-177.
94. Liebmann, S., Hock, B. (1989): Auxin concentrations in roots of spruce during in vitro ectomycorrhizal synthesis. *Life Science Advances* 8, 99-104.
89. Hock, B. (1988): Die Mykorrhiza und ihre Bedeutung für die Pflanze. Bayer. Landwirtschaft. Jahrbuch, Sonderheft 1, 249-261.
81. Beyrle, H., Penningsfeld, F., Hock, B. (1987): Die gärtnerische Aufzucht von feuchtigkeitsliebenden *Dactylorhiza*-Arten. *Die Orchidee* 38, 302-306.
61. Beyrle, H., Penningsfeld, F., Hock, B. (1985): Orchideenmykorrhiza: Symbiotische Anzucht einiger *Dactylorhiza*-Arten. *Zeitschrift für Mykologie* 51, 185-198.
52. Hock, B., Bartunek, A. (1984): Ektomykorrhiza. *Naturwiss. Rundschau* 11, 437-444.

4. Plant Physiology

4.1 Glyoxysome development

169. Hock, B. (1995): Phytochrome. *Progress in Botany*, 56, Springer-Verlag Berlin Heidelberg New York, S. 201-235.
98. Hock, B. (1989): Developmental Physiology. In: *Progress in Botany* 50, Springer Verlag Berlin, Heidelberg, New York, S. 133-157.
90. Sautter, C., Sautter, E., Hock, B. (1988): Import of peroxisomal hydroxypyruvate reductase into glyoxysomes. *Planta* 176, 149-158.
87. Sautter, C., Keller, G., Hock, B. (1988): Glyoxysomal citrate synthase from watermelon cotyledons: immunocytochemical localization and heterologous translation in *Xenopus* oocytes. *Planta* 173, 289-297.
83. Sauter, J.J., Kammerbauer, H., Pambor, L., Hock, B. (1987): Evidence for the accelerated micromorphological degradation of epistomal waxes in Norway spruce by motor vehicle emissions. *Eur. J. Forest Pathol.* 17, 444-448.
78. Gietl, C., Hock, B. (1987): Glyoxysomal and mitochondrial malate dehydrogenase in watermelon cotyledons. *Isozymes* 16, 175-192.
76. Hock, B., Gietl, C., Sautter, C. (1987): Biogenesis of plant microbodies. *Peroxisomes in Biol. & Med.* Springer-Verlag Heidelberg, 417-425.
72. Gietl, C., Lottspeich, F., Hock, B. (1986): Sequence homologies between glyoxysomal and mitochondrial malate dehydrogenase. *Planta* 169, 555-558.
66. Gietl, C., Hock, B. (1986): Import of glyoxysomal malate dehydrogenase precursor in glyoxysomes: A heterologous invitro system. *Planta* 167, 87-93.
55. Hock, B. (1984): Processing and organelle import of malate dehydrogenase isoenzymes: Is there a common precursor for the glyoxysomal and mitochondrial forms? *Physiol. Vég.* 22, 333-339.
54. Gietl, C., Hock, B. (1984): Import of invitro-synthesized glyoxysomal malate dehydrogenase into isolated watermelon glyoxysomes. *Planta* 62, 261-267.
51. Gietl, C., Hock, B. (1984): Uptake and processing of in vitro synthesized mitochondrial malate dehydrogenase by isolated watermelon mitochondria. *Z. Pflanzenphysiol.* 114, 393-401.
50. Hock, B. (1983): Biogenese von Glyoxysomen/Peroxisomen. *Ber. Dt. Bot. Ges.* 96, Heft 2/3, 259-265.
46. Gietl, C., Hock, B. (1983): A common higher molecular weight precursor for glyoxysomal and mitochondrial MDH. 15th FEBS-Meeting. Abstracts (S-08 MO-191), Brussels, Belgium.

44. Sautter, C., Hock, B. (1982): Fluorescence immunohistochemical localization of malate dehydrogenase isoenzymes in watermelon cotyledons: A development study of glyoxysomes and mitochondria. *Plant Physiol.* 70, 1162-1168.
43. Gietl, C., Hock, B. (1982): Organelle-bound malate dehydrogenase isoenzymes are synthesized as higher molecular weight precursors. *Plant. Physiol.* 70, 483-487.
42. Hock, B., Gietl, C. (1982): Cell-free synthesis of watermelon glyoxysomal malate dehydrogenase. A comparison with the mitochondrial isoenzyme. *Ann. N.Y. Acad. Sci.* 386, 350-361.
41. Sautter, C., Hock, B. (1982): Crozier formation in *Byssoschlamys nivea*. *Mycologia* 74, 256-264.
40. Sautter, C., Bartscherer, H.C., Hock, B. (1981): Separation of plant cell organelles by zonal zentrifugation in reorienting density gradients. *Analyt. Biochem.* 113, 179-184.
37. Hock, B., Fritze, U., Haberland, U. (1979): Flachbett-Elektrofokussierung in Sephadex-Gelen: Präparative Trennung der cytoplasmatischen Malat-Dehydrogenase-Isoenzyme. *GIT Fachz. Lab.* 23, 994-998.
36. Walk, R.-A., Hock, B. (1978): Cell free synthesis of glyoxysomal malate dehydrogenase. *Biochem. Biophys. Res. Commun.* 81, 636-643.
34. Walk, R.-A., Hock, B. (1977): Glyoxysomal and mitochondrial malate dehydrogenase of watermelon (*Citrullus vulgaris*) cotyledons: II. Kinetic properties of the purified isoenzymes. *Planta* 136, 221-228.
33. Walk, R.-A., Michaeli, S., Hock, B. (1977): Glyoxysomal and mitochondrial malate dehydrogenase of watermelon (*Citrullus vulgaris*) cotyledons: I. Molecular properties of the purified isoenzymes. *Planta* 136, 211-220.
31. Walk, R.-A., Hock, B. (1977): Glyoxysomal malate dehydrogenase of watermelon cotyledons: De novo synthesis on cytoplasmic ribosomes. *Planta (Berl.)* 134, 277-285.
30. Walk, R.-A., Hock, B. (1976): Separation of malate dehydrogenase isoenzymes by affinity chromatography on 5'-AMP-sepharose. *Eur. J. Biochem.* 71, 25-32.
26. Walk, R.-A., Hock, B. (1976): Mitochondrial malate dehydrogenase of watermelon cotyledons: Time course and mode of enzyme activity changes during germination. *Planta (Berl.)* 129, 27-32.
22. Hock, B. (1974): Antikörper gegen die glyoxysomale Malat-Dehydrogenase. *Ber. Deutsch. Bot. Ges.* 87, 109-118.
21. Hock, B., Uthardt, D., Eslamy, E. (1974): Zweidimensionale Immunelektrophorese (Laurell-Technik) in Polyacrylamid-Gelen. *GIT Fachz. Lab.* 18, 525-528.

20. Hock, B. (1974): Antikörper gegen Glyoxysomenmembranen. *Planta* 115, 217-280.
19. Wegner, J., Bahn, M., Hock, B. (1973): Automatische Bestimmung der Zerfallsrate bei Einfach- und Doppelmarkierung mit einem programmierbaren Tischrechner im Offline-Betrieb. *Kerntechnik* 15, 467-472.
16. Wegner, J., Bahn, M., Hock, B. (1973): Automatische Löschkorrektur bei der Flüssigkeits-Szintillationsmeßtechnik mit Hilfe eines programmierbaren Tischrechners. *Atomkernenergie* 21, 72.
15. Hock, B., Uthardt, D. (1973): Die Verwendung der Präparativen Disk-Elektrophorese zur Trennung der MDH-Isoenzyme. *GIT Fachz. Lab.* 17, 327-332.
14. Hock, B. (1973): Kompartimentierung und Eigenschaften der MDH-Isoenzyme aus Wassermelonenkeimblättern. *Planta (Berl.)* 112, 137-148.
13. Hock, B. (1973): Isoenzyme der Malat-Dehydrogenase aus Wassermelonenkeimlingen: Mikroheterogenität und deren Aufhebung bei der Samenkeimung. *Planta (Berl.)* 110, 329-344.
12. Hock, B. (1972): Veränderung des Malat-Dehydrogenase Isoenzym-Spektrums bei der Samenkeimung. *Ber. Deutsch. Bot. Ges.* 85, 579-584.
11. Hock, B. (1971): Veränderungen des MDH-Isoenzym-Spektrums bei der Samenkeimung von Wassermelonen. *Naturwiss.* 58, 566-567.
8. Hock, B. (1970): Die zeitliche Dauer der Isocitrat-Lyase-Synthese in Kotyledonen von Wassermelonenkeimlingen. *Planta (Berl.)* 93, 26-28.
7. Hock, B. (1970): Die Regulation der Isocitrat-Lyase bei Wassermelonenkeimlingen. *Naturwissenschaften* 57, 138.
6. Hock, B. (1969): Die Hemmung der Isocitrat-Lyase bei Wassermelonenkeimlingen durch Weißlicht. *Planta (Berl.)* 85, 340-350.
5. Hock, B. (1967): Nature of a rapidly labeled RNA fraction described in higher plant systems. *Plants Physiol.* 42, 1149-1152.
4. Hock, B., Beevers, H. (1966): Development and decline of the glyoxylate cycle enzymes in watermelon seedlings (*Citrullus vulgaris* Schrad.) Effects of Dactinomycin and cycloheximide. *Z. Pflanzenphysiol.* 55, 405-414.

4.2 Phytochrome, plant development

spruce at the highway border: Effects on gas exchange and growth. *Experientia* 43, 1124-1125.

71. Hock, B. (1986): Developmental Physiology. In: *Progress in Botany*, Vol. 48, Springer Verlag Heidelberg, S. 183-204.

67. Hock, B. (1986): Tumorbildung bei Pflanzen. Naturwiss. Rundschau 39, 333-340.
57. Hock, B. (1984): Developmental physiology. In: Progress in Botany, Vol. 46, Springer-Verlag Berlin, Heidelberg, S. 141-171.
56. Weigel, U., Horn, W., Hock, B. (1984): Endogenous auxin levels in terminal stem cuttings of *Chrysanthemum morifolium* during adventitious rooting. *Physiol. Plant.* 61, 422-428.
9. Schopfer, P., Hock, B. (1971): Nachweis der Phytochrom-induzierten de novo-Synthese von Phenylalaninammoniumlyase (PAL, E.C. 4.3.1.5) in Keimlingen von *Sinapis alba* L. durch Dichtemarkierung mit Deuterium. *Planta (Berl.)* 96, 248-253.
3. Hock, B., Kühnert, E., Mohr H. (1965): Die Regulation von Fettabbau und Atmung bei Senfkeimlingen durch Licht (*Sinapis alba* L.) *Planta (Berl.)* 65, 129-138.
2. Hock, B., Mohr, H. (1965): Eine quantitative Analyse von Wachstumsvorgängen im Zusammenhang mit der Photomorphogenese von Senfkeimlingen (*Sinapis alba* L.) *Planta (Berl.)* 65, 1-16.
1. Hock, B., Mohr, H. (1964): Die Regulation der O₂-Aufnahme von Senfkeimlingen (*Sinapis alba* L.) durch Licht. *Planta (Berl.)* 61, 209-228.

4.3 Mykology

120. Seeholzer-Nguyen, B., Hock, B. (1991): Biodegradation of Trichlorphenols by Fungi. *Angew. Botanik* 65, 219-227.
80. Zollfrank, U., Hock, B. (1987): Infection of Norway spruce by *Armillaria* under controlled conditions. *Eur. J. For. Pathol.* 17, 266-270.
79. Zollfrank, U., Sautter, C., Hock, B. (1987): Fluorescence immunohistochemical detection of *Armillaria* and *Heterobasidion* in Norway spruce. *Eur. J. For. Pathol.* 17, 230-237.
77. Schmidpeter, B., Fackler, U., Hock, B. (1987): Increase of free IAA in *Solanum tuberosum* infected by *Synchytrium endobioticum*. *Zeitschr. Pflanzenkrankh. u. Pflanzenschutz* 94, 121-125.
38. Hock, B., Bahn, M., Walk, R.-A., Nitschke, U. (1978): The control of fruiting body formation in the ascomycete *Sordaria macrospora* Auersw. by regulation of hyphal development. *Planta* 141, 93-103.
25. Molowitz, R., Bahn, M., Hock, B. (1976): The control of fruiting body formation in the ascomycete *Sordaria macrospora* Auersw. by arginine and biotine: A two-factor analysis. *Planta (Berl.)* 128, 143-148.
23. Bahn, M., Hock, B. (1974): Morphogenese von *Sordaria macrospora*: Induktion der Perithezienbildung durch Arginin. *Ber. Deutsch. Bot. Ges.* 87, 433-442.

17. Bahn, M., Hock, B. (1973): Morphogenese von *Sordaria macrospora*: Die Induktion der Perithezienbildung. Ber. Deutsch. Bot. Ges. 86, 309-311.

4.4 Forest disease

111. Ziegler-Jöns, A., Kammerbauer, H., Drenkard, S., Hock, B., Knoppik, D. (1990): Independent photosynthetic response of exposed and unexposed twigs of the same spruce tree to car exhaust. Eur. J. For. Pathol. 20, 376-380.

85. Elling, W., Huber, S.J., Bankstahl, B., Hock, B. (1987): Atmospheric Transport of Atrazine: A Simple Device for its detection. Envir. Poll. 48, 77-82.

84. Kammerbauer, H., Selinger, H., Römmelt, R., Ziegler-Jöns, A., Knoppik, D., Hock, B. (1987): Toxic components of motor vehicle emissions for the spruce *Picea abies*. Environm. Pollution 48, 235-243.

82. Kammerbauer, H., Ziegler-Jöns, A., Selinger, H., Römmelt, R., Knoppik, D., Hock, B. (1987): Exposure of Norway 70. Fackler, U., Reich, J., Hock, B. (1986): Auxin distribution in spruce needles. J. Plant. Physiol. 126, 163-172.

69. Kammerbauer, H., Selinger, H., Römmelt, R., Ziegler-Jöns, A., Knoppik, D., Hock, B. (1986): Toxic effects of exhaust emissions on spruce (*Picea abies*) and their reduction by the catalytic converter. Environm. Pollution (A) 42, 133-142.

63. Hock, B. (1985): Schädigung der Fichte durch Autoabgase. Die Wirkung des Katalysators. Allg. Forstzeitschr. 49, 1345-1346.

62. Fackler, U., Huber, W., Hock, B. (1986): Einfluß von Mineralstoffernährung, Ozon und saurem Nebel auf Indoleessigsäure und Abscisinsäure in Nadeln von *Picea abies* (L.) KARST. Forstwiss. Cbl. 105, 254-257.

5. Patents

1. Drägerwerk AG, Pullen, S., Hock, B., Wuske, T., Manns, A., (1994): Monoklonale Antikörper zum Nachweis von Pyrethroiden sowie Verfahren zu deren Herstellung. WILA-PSA, Heft 31, 40. Jhrg., 04.08.1994

2. Diagnostic Systems, Langhals, H., Hock, B., Brosius, R., (1998): Die immunchemische Bestimmung von Inhaltsstoffen auf Fasern und Polymeren, die Identifikation von Allergenen und kanzerogenen Azofarbstoffen. Deutsches Patentamt München, D.O.S. 1965199, 11.12.1996.

6. Books

299. Hock, B. (2018): Was ist Leben? (Buch). Komplett-Media (Verlag). 978-3-8312-6958-7 (ISBN).
283. Hock, B., Elstner, E.F. (ed.) (2005): Plant Toxicology. 4. Edition, Marcel Dekker-Verlag, New York (Buch). ISBN:0-8247-5323-2.
253. Hock, B., (ed.) (2001): Bioresponse-linked Instrumental Analysis. 195 S., Teubner-Verlag Stuttgart-Leipzig-Wiesbaden (Buch).
249. Hock, B. (ed.) (2000): The Mycota IX. Fungal Associations. Springer-Verlag Berlin Heidelberg, (Buch).
232. Varma, A., Hock, B. (eds.) (1998): Mycorrhiza. Structure, Function, Molecular Biology and Biotechnology. (2. ed.) 704 p., Springer-Verlag Berlin-Heidelberg (Book).
214. Hock, B., Barcelo, D., Cammann K., Hansen, P.-D., Turner, A. (eds.) (1998): Biosensors for environmental diagnostics. 279 S. Teubner-Verlag Stuttgart-Leipzig (Buch).
183. Hock, B., Elstner, E.F. (eds.) (1995): Schadwirkungen auf Pflanzen. 444 S., 3. Aufl., Spektrum Akademischer Verlag Heidelberg-Berlin-Oxford, (Buch).
177. Hock, B., Nießner, R. (eds.) (1995): Immunochemical detection of pesticides. 195 p. VCH-Verlagsgesellschaft mbH Weinheim. Buch (DFG).
168. Varma, A., Hock, B. (eds.) (1995): Mycorrhiza. Structure, Function, Molecular Biology and Biotechnology. 747 S., Springer-Verlag Berlin-Heidelberg, Buch.
163. Hock, B., Fedtke, C., Schmidt, R. R. (eds.) (1995): Herbizide - Entwicklung, Anwendung, Wirkungen, Nebenwirkungen. 358 S., Georg Thieme Verlag, Stuttgart-New York.
86. Hock, B., Elstner, E.F. (eds.) (1988): Schadwirkungen auf Pflanzen. Lehrbuch der Pflanzentoxikologie. 2. Auflage. 360 S. B.I. Wissenschaftsverlag, Bibliographisches Institut.
53. Hock, B., Elstner, E.F. (Eds.) (1984): Pflanzentoxikologie. S. 1-346. B.I.Wissenschaftsverlag, Bibliographisches Institut Mannheim, Wien, Zürich.
10. Hock, B. (1971): Biochemie. Grundlagen der biologischen Energiegewinnung und wichtige Stoffklassen. Fernstudienlehrgang für Biologielehrer, 6. Studienbrief. Deutsches Institut für Fernstudien an der Universität Tübingen.

7. Films, Video Discs

199. Hock, B. (1997): Bau und Wachstum des Schachtelhalms *Equisetum hyemale*. Video F,121/2 min., C 1940. Institut für den Wissenschaftlichen Film, Göttingen.
197. Bereiter-Hahn, J., Bowien, B., Fischer, A., Hausmann, K., Hock, B. (1997): Cell Biology - III. Cellular responses and interactions. Accompanying publication for the videodisc C 1810. Institut für den Wissenschaftlichen Film, Göttingen.
154. Bereiter-Hahn, J., Bowien, B., Fischer, A., Hausmann, K., Hock, B. (1993): Cell Biology. II. Cellular responses and interactions. Bildplatte. Institut für den Wissenschaftlichen Film Göttingen C 1810.
88. Bereiter-Hahn, Fischer, A., Hock, B., Kiermayer, O. (eds.) (1988): Cell Biology II. Development and Reproduction. Videodisc und Begleitpublikation zur Bildplatte C 1655, S. 1-79. IWF, Göttingen.
65. Webster, J., Hock, B. (1985): Ascus- und Fruchtkörperentwicklung bei den Ascomyceten. Bildplatte C 1586 des IWF, Göttingen.
58. Bereiter-Hahn, Fischer, A., Hock, B., Kiermayer, O. (eds.) (1984): Cell Biology. I. Functional Organization. Videodisc and Publication. Inst. Wiss. Film, Göttingen.
49. Hock, B., Bolze, A., Inst. Wiss. Film (1983): Die Entwicklung des Schachtelhalms. Film C 1523 des IWF, Göttingen.
48. Hock, B., Bolze, A., Inst. Wiss. Film (1983): Die Zhabotinsky-Reaktion als Modell einer Musterbildung. Publ. Wiss. Film, Sekt. Biol., Ser. 16/C 1473.
47. Hock, B., Bolze, A., Inst. Wiss. Film (1983): Die Briggs-Rauscher-Reaktion als Modell einer chemischen Uhr. Publ. Wiss. Film, Sekt. Biol. Ser. 16/C 1495.
45. Bolze, A., Hock, B. (1982): The development of *Equisetum*: Making a super-8 film with the Wild Photomakroskop. *Microskopion* 40, 22-26.
39. Hock, B., Höhne, I., Inst. Wiss. Film (1981): Haken- und Ascusbildung bei *Byssoschlamys*. Film C 1423 des IWF, Göttingen.
35. Bahn, M., Matthies, J., Hock, B. (1977): Belichtungsautomatik für die Mikrokinematographie. *GIT Fachz. Lab.* 21, 860-864.
32. Hock, B., Bahn, M., Inst. Wiss. Film (1977): Regulation der Entwicklung von *Sordaria macrospora* durch Biotin und Arginin. Film B 1262 des IWF, Göttingen. Publikation von B. Hock (1982) *Publikation Wiss. Film, Sekt. Biol., Ser. 15, Nr. 1/B 1262 (1982)*.
28. Hock, B., Bahn, M., Galle, H.-K., Heunert, H.H., Weiß, J. (1976): Entwicklung von *Sordaria macrospora* (Ascomycetes). Göttingen (Tonfilm E 2359), Begleittext.
29. Hock, B., Bahn, M. (1976): *Sordaria macrospora* (Ascomycetes). Entwicklungszyklus, *Encyclopaedia cinematographica* (edt. G. Wolf), Göttingen.

27. Hock, B., Bahn, M. (1976): Quantitative image analysis of the fruiting body formation in the ascomycete *Sordaria macrospora*. *Analyt. Chem.* 279, 97.
