

REFERENCES

- Adis, J., J.W. De Morais, and E.F. Ribeiri. 1987. Vertical Distribution and Abundance of Arthropods in Soil of a Neotropical Secondary Forest During the Dry Season. *Trop. Ecol.* 28, 174-181.
- Allen, J.E. 1992. *Energy Resources for Changing World*. Cambridge University Press, 11-12.
- Alloway, B.J. 1995. *Heavy Metal in Soils*. London, Chapman & Hall, 30-215.
- Axelsson, O., C. Dahlgren, D. Jansson, and S.O. Rehnlung. 1978. *Br. J. Indus. Med.*, 35, 8-15.
- Baldi, A. and T. Kisbenedek. 1994. Comparative Analysis of Edge Effect on Bird And Beetles Communities. *Acta Zoologica Academiae Scientiarum Hungaricae* 40 (1), 1-14.
- Beeby, A. 1993. *Applying Ecology*. Chapman and Hall, London, 80-82.
- Behan, V.M., S.B. Hill, and Mc.E. Kevan. 1978. Effects of Nitrogen Fertilizers, as Urea, on Acarina and Other Arthropods in Quebec Black Spruce Humus. *Pedo-Biologia* 18, 249-263.
- Berback, B. 1992. Industrial Metabolism : the Emerging Landscape of Heavy Metal Emission in Sweden. In : Heavy Metals of the 20th Century Recorded in Oak Tree Rings, Jonsson et al., (ed.) 1977. *J. Environ. Qual.* 26, 1638-1643.
- Bergolio, R.M. 1964. *Prensa, Med. Argent.* 51, 994-998.
- Borror, D. J., D.M. DeLong, and C.A. Triplehorn. 1964. *An introduction to the Study of Insects*. 4th Edition. Holt, Reinhart and Winston, New York, 94-617.
- Borror, D.J., C.A. Triplehorn, and N.F. Johnson. 1989. *An Introduction to the Study of Insects*. 6th Edition. Saunders College Publishing, Philadelphia, 101-588.
- Bouletreau, M.J. and D. Sillans. 1996. Effects of Interaction Between Temperature and CO₂ on Life-History Traits of Two *Drosophila sp* (Diptera : Drosophilidae). *European Journal of Entomology* 93 (3), 451-459.
- Brown, E. W. A. 1978. *Ecology of Pesticides*. John Willey & Sons, New York, 520.
- Bowen, H.J.M. 1979. Environmental Chemistry of the Element. In : *Biological Monitoring of Heavy Metal Pollution*. Martin, M.H. and P.J. Coughttrey. 1982. Applied Science Publishers, London, 152-160.

- Buchanan, D.J. and D. Brenkley. 1994. Mining and Its Environmental Impact. In : Green Coal Mining, Issues in Environmental Science and Technology, R. E. Hestler and R. M. Harrison (ed.). 1996. *The Royal Society of Chemistry*, 71-72.
- Burchfield, J.L., H.F. Dufly, P.H. Bartels, and P.H. Needleman. 1980. In : *Low Level Lead Exposure : The Clinical Implications of Current Research*, Needleman, H.L. (ed.). Raven Press, 128-143.
- Buxton, R.D. 1981. Changes in the Composition and Activities of Termite Communities in Relation to Changing Rainfall. *Oecologia* 51, 371-378.
- Carrol, D. 1970. *Rock Weathering*. Plenum Press, 145-168.
- Carrol, D.M. and J.F. Loneragan. 1969. Response of Plant Species to Concentrations of Zinc in Solution. In : *Air Pollutant and Their Effects on the Terrestrial Ecosystem*. Legge, A.H. and S.V. Krupa. (ed.). 1986. John Wiley & Sons, New York. 339-359.
- Chadwick, N.H., N.H. Nighton and N. Lindman. 1987. *Environmental Impacts of Coal Mining and Utilization*. Pergamon Press, Oxford, 8-14, 171-200.
- Cherry, D.S. and R.K. Guthrie. 1979. The Uptake of Chemical Elements From Coal Ash and settling Basin Effluent by Primary Producers II. Relation Between Concentration in Ash Deposits and Tissues of Grass Growing on the Ash. *The Science of Total Environment*, 13, 27-31.
- Chinery, M. 1976. *A field Guide to the Insects of Britain and Northern Europe*. William Collins Sons & Co. Ltd., London, 52-320.
- Coulson, S.J., I.D. Hodkinson, N.R. Webb, W. Block, J. Bale, A.T. Strathdee, M.R. Worland and C. Wooly. 1996. Effects of Experimental Temperature Elevation on High-Artic Soil Microarthropod Populations. *Polar Biology* 16 (2), 147-1534.
- Curry, J.D. 1978. Relationship Between Microarthropod Communities, Soil and Vegetation Types. *Scientific Proceeding of the Royal Dublin Society*, series A. 6, 131-141.
- Davies, B. E. (1980). Trace Element Pollution. In : *Applied Soil Trace Elements* Davies, B.E. (ed.). 1989. John Wiley and Sons, Chichester, 287-351.
- Department of Geological Sciences. 1996. *Excursion Guidebook. International Symposium on Geology and Environment*, 28 January to 2 February 1996, Faculty of Science, Chiang Mai University, Chiang Mai, Thailand, 20-36.

- De Souza, O.F.F. and V.K. Brown. 1994. Effect of Habitat Fragmentation on Amazonian Termite Communities. *Journal of Tropical ecology* 10, 197-206.
- Doran, J.W. and D.C. Marten. 1972. Molybdenum Availability as Influenced by Application of Fly Ash to Soil. In : *Trace-Element Contamination of the Environment*. Purves, D. (ed.) 1985. Elsevier Science Publishers B. V., Amsterdam, 70-71.
- EGAT. 1991. Mae Moh Lignite Mine. Department of Public Relation, 16.
- Egorov, A.P., N.V. Laktinova, I.V. Novoselova, and N.V. Popinako. 1978. Evaluation of the Passage of Trace Elements into Environment on the Combustion of Coals in Thermal Electric Power Stations. *Solid Fuel Chem*, 12, 141-144.
- Electricity Generating Authority of Thailand. 1994. *Mae Moh Power Plant*. Public Relation Department, 1-12.
- Electricity Generating Authority of Thailand. 1996. *Egat 1995-1996*. Public Relation Department, 12.
- Elseewi, A.A., A.L. Page and I.R. Straughan. 1986. Soil-Coal Fired Power Plant Effluent Interactions: An Evaluation. In : *Air Pollutants and Their Effects on the Terrestrial Ecosystem* Legge, A.H. and S.V. Krupa (ed.) 1986. John Wiley & Sons, New York, 415- 437.
- Field, A.C. and Purves, D. 1961. The Intake of Soil by the Grazing Sheep. In : *Trace-Element Contamination of the Environment*, Purves, D. (ed.) 1985. Elsevier Science Publishers B.V., Amsterdam, 66-74.
- Forstner, U. and G.T. Wittmann. 1981. *Metal Pollution in the Aquatic Environment*. 2nd Edition. Springer-Verlag, Berlin, 39-41.
- Furr, A.K., T. F. Parkinson, W. H. Gutenmann, I.S. Pakkala, and D.J. Lisk. 1978. Element Content of Vegetables, Grains and Forages Field-Grown on Fly Ash Amended Soils. *J. Agric. Food. Chem.* 25 (2), 257-359.
- Fyfe, W.S. 1993. The Life Support System in Danger : Challenge for the Earth Sciences. *Earth Science* vol. 47. No. 3, 179-201.
- Gillham, E.W.F. and D.T. Simpson. 1973. The uptake of Minerals by Plants Growing On Pulverised Fuel Ash. In : *Trace-Element Contamination of the Environment*, Purves, D. (ed.) 1985. Elsevier Science Publishers B. V, Amsterdam, 70.
- Gluskoter, H.J., R.R. Ruch, W.G. Miller, R.A. Cahill, G.B. Dreher, and J.K. Kuhn. 1977. Trace Elements in Coal : Occurrence and Distribution. III. *State Geological Survey Circular* 499, 154.

- Greszta, J., S. Braniewski, K. Marczynska-Galkowska, and A. Nosek. 1979. The Effect of Dusts Emitted by Non-Ferrous Metal Smelters on the Soil, Soil Microflora and Selected Tree Species. In : *Air Pollutants and Their Effects on the Terrestrial Ecosystem*, Legge, A.H. and S.V. Krupa (ed.). 1986. John Wiley & Sons, New York, 339-359.
- Griffith, E.D., and A.W. Clarke. 1979. World Coal Production. *Sci. Am.* 240 (1), 38-47.
- Guderian, R., G. H.M. Krause, and H. Keiser. 1977. Untersuchungen zur Kombinationswirkung von Schwefeldioxid und Schwermetallhaltigen Stauben auf Pflanzen. In : *Air Pollutants and Their Effects on the Terrestrial Ecosystem*, Legge, A.H. and S.V. Krupa. (ed.) 1986. John Wiley & Sons, New York, 339-359.
- Gupta, S.K. 1991. Assessment of Ecotoxicological Risk of Accumulated Metals in Soils With the Help of Chemical Method Standardized Through Biological Tests. In : *Heavy Metals in the Environment*, Vernet, J.P. (ed.) 1991. Elsevier Science Publishers B.V., Amsterdam, 56.
- Healy, W.B. 1968. Ingestion of Soil by Dairy Cows. In : *Trace-Element Contamination of the Environment*, Purves, D. (ed.) 1986. Elsevier Science Publishers B.V., Amsterdam, 124.
- Institute of Environmental Research. 1981. *Soil Characteristic of Mae Moh Mine : Prepared for the Electricity Generating Authority of Thailand*. Chulalongkorn University, Bangkok, 6-17.
- Jaques, H.E. 1947. *The Insect*. W.M. C. Brown Company Publishers, Dubuque, Iowa, 47-171.
- Jitapunkul, S., P. Charussunyong, and S. Jantanachotiran. 1985. Geology of Tertiary Deposits of Mae Moh Basin. *Proceedings of Conference on Lignite Industry in Thailand*, (24), 1-16.
- Kizimirova, M. and M. Slovak. 1996. Effects of Heavy Metals and Fluorine on Phagocytosis and Phenoloxidase Activity in *Mamestra brassica* (Lepidoptera: Noctuidae) . *European journal of Entomology* 93 (3), 467-473.
- Klein, D.H. and P. Russel. 1973. Heavy Metals : Fallout Around a Power Plant. *Environmental Science and Technology*, 7, 357-8.
- Kraemer, F. 1976. Erste Untersuchungen zur Erstellung eines Bodenbelastungskatasters (Pb, Zn, Cd, Cu) im Raume Duisberg-Dinslaken. In : *Air Pollutants and Their Effects on the Terrestrial Ecosystem*, Legge, A.H. and S.V. Krupa. (ed.) 1986. John Wiley & Sons, New York, 347.

- Krauze, G.H.M. 1974. Zur Aufnahme von Zink und Cadmium durch Oberirdische Pflanzenorgane. In : *Air Pollutants and Their Effects on the Terrestrial Ecosystem*. Legge, A.H. and S.V. Krupa. (ed.)1986. John Wiley & Sons, New York, 339-359.
- Larcher, W. 1980. *Physiological Plant Ecology*. Springer Verlag, Berlin, 191-194.
- Legge, A.H. and S.V. Krupa. 1986. *Air Pollutants and Their Effects on the Terrestrial Ecosystem*. John Wiley & Sons, New York, 171-216.
- Levitt, J. 1980. *Responses of Plants to Environmental Stress : Water, Radiation, and Other Stresses*. Vol.2. Academic Press, New York, 434-453.
- Ludwig, J.A. and J.F. Reynolds. 1988. *Statistical Ecology A Primer on Methods and Computing*. John Wiley & Sons, New York, 85-103; 166-178.
- Mabuchi, K.A., A. Lilienfeld and L. Snell. (1979). *Arch. Environ. Health*, 34, 312-319.
- Macklyn, M. 1992. Metal Pollution of Soils and Sediments : A geographical Perspective. In : *Managing the Human Impact on the Natural Environment Pattern and Processes* Newson, M. 1992. John Wiley & Sons, Chichester, 172-195.
- Malmer, N. 1976. Acid Precipitation : Chemical Changes in the Soil. *Ambio*, 5, 231-234.
- Martin, M.H. and P.J. Coughtrey. 1982. *Biological Monitoring of Heavy Metal Pollution*. Applied Science Publishers, London, 2-4, 153-169, 267-270, 307-7.
- Mayer, R. 1991. The Impact of Atmospheric Acid Deposition on Soil and Vegetation In : *Heavy Metals in the Environment*, Vernet, J.P. (ed.) 1991. Elsevier Science Publishers B.V., Amsterdam, 21-48.
- Mitchell, R.L. 1964. Trace Elements in Soils and Factors which Affect Their Availability. In : *Trace Element Contamination of the Environment*, Purves, D. (ed.). 1986. Elsevier Science Publishers B.V., Amsterdam, 69-70.
- Moore, J.C., D.E. Walter, and H.W. Hunt. 1988. Arthropod Regulation of Micro- and Mesobiota in Below-Ground Detrital Food Webs. *Ann. Rev. Entomol.* 23, 33-40.
- Needlemen, H.L., C.E. Gunnoe, A. Leviton, R. Reed, H. Peresie, C. Maker, and P. Baret. 1979. Deficits in Psychologic and Classroom Performance of Children with Elevated Dentine Lead levels. *New England Journal of Medicine*, 300, 689-95.

- Newson, M. 1992. *Managing the Human Impact on the Natural Environment Pattern and Pattern and Processes*. John Wiley & Sons, Chichester, 232-241.
- Nriagu, J.O. 1989. A Global Assessment of Natural Sources of Atmospheric Trace Metal. *Nature*, 338, 689-95.
- Nriagu, J.O. 1990. Global Metal Pollution : Poisoning the Biosphere. *Environment* 32 (7), 7-33.
- Nriagu, J.O. and J.M. Pacyna. 1988. Qualitative Assessment of Worldwide Contamination of Air, Water and Soils by Trace Metals. *Nature*, 333, 134-139.
- Opler, P.A. 1976. The Parade of Passing Species : Extinction Past and Present. *Sci. Tech.* 43, 30-34.
- Page, A.L., A.A. Elseewi, and I.R. Straughan. 1979. Physical and Chemical Properties of Fly Ash From Coal-Fired Power Plant With Reference to Environmental Impacts. *Residue Rev.* 71 (2), 81-120.
- Phung, H.T., L.J. Lund, A.L. Page, and G.R. Bradford. 1979. Trace Elements in Fly Ash and Their Release in Water and Treated Soils. In : *Trace-Element Contamination of the Environment*, Purves, D. (ed.)1986. Elsevier Science Publishers B.V., Amsterdam, 66-74.
- Plank, C.O., and D.C. Martens. 1974. Boron Availability as Influenced by Application of Fly Ash to Soil. *Soil Sci. Soc. Am. Proc.* 36 (60), 974-977.
- Purves, D. 1985. *Trace-Element Contamination of the Environment*. Elsevier Science Publishers B.V., Amsterdam, 66-73.
- Quenton, R.H. 1980. World Coal Trade Through the Year 2000- Rapid Growth and Political Challenges. In *11th World Energy Conference, Munich*, vol. 1A, 383-402.
- Ratanasthien, B., W.S. Fyfe, N.S. McIntyre and M.A. Powell. 1990. Element Separation and Absorption in Lignite Ash Burning in Mac Moh Power Plant. In King Mongkut's Institute of Technology and Ministry of Science, Technology and Energy *International Conference on Energy and Environment*, Bangkok., 294-303.
- Renberg, I., M.W. Person, and O. Emteryd. (1994). Pre-Industrial Atmospheric Lead Contamination Detected in Swedish Lake Sediments. In *Heavy Metals of the 20th Century Recorded in Oak Tree Rings*. *J. Environ. Qual.* 26, 1638-1643 .

- Root, R.B. 1973. Organization of Plant-Arthropod Association in Simple and Diverse Habitat : the Fauna of Collard (*Brassica oleracea*). *Ecol. Monogr.* 43, 95-124.
- Ruch, R.R., H.J. Gluskoter and N.F. Shimp. 1974. Occurrence and Distribution of Potentially Volatile Trace Elements in Coal. Final report. *Environmental Geology Notes*, no 72, 76-81.
- Salomons, W. and U. Forstner. 1984. *Metal in the Hydrocycle*. Springer-Verlag, Berlin, 349.
- Scanlon, D.H., and J.C. Daggan. (1979). Growth and Element Uptake of Woody Plant on Fly Ash. *Environmental Science and Technology*, 13, 311-15.
- Singhal, R.L. and Thomas, J.A. 1980. *Lead Toxicity*, Schwarzenberg, Munich, 112-119
- Somme, L., R.L. Davidson and G. Onore. (1996). Adaptations of Insect at High Altitudes of Chimborazo, Ecuador. *European Journal of Entomology* 93 (3), 313-318.
- Spiegel, H. 1996. Biodiversity of Soil Microarthropods : The Filtering of Species. *Biodiversity and Conservation* 5 (2), 251-260.
- Stone, C. and P.E. Bocon. (1995). Leaf Dynamics and Insect Herbivory in an Eucalyptus camaldulensis Forest under Moisture Stress. *Australian Journal of Ecology* 20 (4), 473-481.
- Straughan, I., A.A. Elsewii, and A.L. Page. 1978. Mobilization of Selected Trace Elements in Residues from coal Combustion With Special Reference to Fly Ash. In : *Traces Substances in Environmental Health XII* D.D. Hemphill (ed.) University of Missouri Press, Columbia, Missouri, 389-402.
- Theis, T.L., and J.L. Wirth. 1977. Sorptive Behavior of Trace Metals on Fly Ash in Aqueous System. *Environ. Sci. Technol.* 11 (12), 1097-1100.
- Turner, M.A. 1973. Effect of Cadmium Treatment on Cadmium and Zinc Uptake by Selected Vegetable Species. In : *Air Pollutants and Their Effects on the Terrestrial Ecosystem*, Legge, A.H. and S.V. Krupa (ed.) 1986. . John Wiley & Sons, New York, 339-359.
- UNCED. 1992. *Thailand National Report to the United Nations Conference on Environment and Development*, 128.
- Verhoef, H.A. 1996. The Multiple Stressor Approach in Ecophysiology as Exemplified by Studies on Temperate Collembola. *European Journal of Entomology* 93 (3), 461-466.

- Vernet, J.P. 1991. *Heavy Metals in the Environment*. Elsevier Science Publishers B.V., Amsterdam,
- Vossel, E. and T. Assman. 1995. The Chilopods, Diplopods and Carabids of Different Utilized Forset Area near Bentheim (Southwestern Lower Saxony) : Comparison of a Commercial High Forest with two Former Woodland Pastures. *Drosera* 95 (2), 127-143.
- Wallwork, J.A. 1970. *Ecology of Soil Animals*. McGraw-Hill, London, 18-20.
- Webb, M. 1979. *The Chemistry, Biochemistry and Biology of cadmium*. Elsevier, North holland Biomedical Press, 195-283.
- Whitford, W.G. 1996. The Importance of the Biodiversity of Soil Biota in arid Eco-System. *Biodiversity and Conservation* 5 (2), 185-195.
- Wikars, Lars-ove. 1995. Clear-Cutting Before Burning Prevent Establishment of the Fire-Adapted *Agonum quadripunctatum* (Coleoptera: Carabidae). *Annales Zoologici Fennici* 32 (4), 35-384
- Winteringham, F.P.W. 1992. *Energy Use and the Environment*. Lewis Publishers, Ann Arbor, USA, 12-14.
- Wittman, G.T.W. 1983. Toxic Metal. In V. Forstner and G.T.W. Wittman. 1983. *Metal Pollution in the Aquatic Environment*, Spriner-Verlag, Berlin, 3-68.
- Zinkler, D. and J. Platthaus. 1996. Tolerance of Soil-Dwelling Collembola to High Carbon Dioxide Concentrations. *European journal of Entomology* 93 (3), 443-450.