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Atrazine and Breast Cancer Risk Bibliography

This bibliography is provided as a service to our readers. It is compiled from the entries in the BCERF [Environmental Risk Factors Bibliographic Database](#).

This bibliography is arranged topically. The topics include:

- [Reviews](#)
- [Chemical Names and Trade Names](#)
- [Transformation Products and Metabolites](#)
- [Uses and Usage](#)
- [Regulatory Status](#)
- [Evidence of Breast Cancer in Humans](#)
- [Evidence of Mammary Cancer in Animals](#)
- [Evidence of Cancer in Animals, non-Mammary Sites](#)
- [Evidence of Cancer in Humans, \(non-breast sites\)](#)
- [Evidence of Estrogenicity](#)
- [Evidence of Hormone Disruption](#)
- [Commentary on Reproductive Aging Theory](#)
- [Effects on Reproduction](#)
- [Mutagenicity and Genotoxicity](#)
- [Evidence of Tumor Promotion](#)
- [N-Nitrosome Formation](#)
- [Biomarkers](#)
- [Environmental Fate: Persistency in Soil](#)
- [Environmental Fate: Groundwater Contamination](#)
- [Environmental Fate: Surface Water Contamination](#)
- [Environmental Fate: Community Water Systems](#)
- [Environmental Fate: Rainwater Levels](#)
- [Food Residues and Cancer](#)
- [Occupational Exposure](#)

Reviews

Brusick, D. J. (1994). An assessment of the genetic toxicity of atrazine: Relevance to human health and environmental effects. *Mutation Research* 317, 133-144.

Chapin, R. E., Stevens, J. T., Hughes, C. L., Kelce, W. R., Hess, R. A., and Daston, G. P. (1996). Symposium overview: Endocrine modulation of reproduction, paper presented by: Eldridge, J. C., Stevens, J. T., Wetzel, L. T., Tisdel, M. O., Brechenridge, C. B., McConnell, R. F., and Simpkins, J. W. , Atrazine: mechanisms of hormonal imbalance in female SD rats. *Fundamental and Applied Toxicology* 29, 1-17.

Dich, J., Zahm, S. H., Hanberg, A., and Adami, H.-O. (1997). Pesticides and cancer. *Cancer Causes and Control* 8, 420-443.

Flury, M. (1996). Experimental evidence of transport of pesticides through field soils- a review. *Journal of Environmental Quality* 25, 25-45.

Hayes, J., W.J. (1982). Herbicides. In Pesticides Studied in Man (Baltimore/London: Williams and Wilkins), pp. 520-577.

Koskinen, W. C., and Clay, S. A. (1997). Factors affecting atrazine fate in north central U.S. soils. *Reviews of Environmental Contamination and Toxicology* 151, 117-165.

Ma, L., and Selim, H. M. (1996). Atrazine retention and transport in soils. *Reviews of Environmental Contamination and Toxicology* 145, 129-173.

Sathiakumar, N., and Delzell, E. (1997). A review of epidemiologic studies of triazine herbicides and cancer. *Critical Reviews in Toxicology* 27, 599-613.

USEPA (1994). Atrazine, Simazine and Cyanazine; Notice of Initiation of Special Review. *Federal Register* 59, 60412-60443.

Chemical Names and Trade Names

Meister, R. T. (1998). Pesticide Dictionary; Atrazine. In *Farm Chemicals Handbook '98*, R. T. Meister, ed. (Willoughby, OH: Meister Publishing Company), pp. C34-35.

Stevens, J. T., and Sumner, D. D. (1991). Chapter 20, Herbicides; 20.17.1 Atrazine. In *Handbook of Pesticide Toxicology*, W. J. Hayes, Jr. and E. R. Laws, Jr., eds. (San Diego: Academic Press, Inc.), pp. 1381-1383.

Transformation Products and Metabolites

Adams, N. H., Levi, P., and Hodgson, E. (1990). *In vitro* studies of the metabolism of atrazine, simazine, and terbutryn in several vertebrate species. *Journal of Agricultural and Food Chemistry* 38, 1411-1417.

Ahrens, W. H. (1994). Atrazine. In *Herbicide Handbook*, W. H. Ahrens, ed. (Champaign, IL: Weed Science Society of America), pp. 20-23.

Bakke, J., Larson, J. D., and Price, C. E. (1972). Metabolism of atrazine and 2-hydroxyatrazine by the rat. *Journal of Agricultural and Food Chemistry* 20, 602-607.

Bradway, D. E., and Moseman, R. F. (1982). Determination of urinary residue levels of the *N*-dealkyl metabolites of triazine herbicides. *Journal of Agricultural and Food Chemistry* 30, 244-247.

Catenacci, G., Maroni, M., Cottica, D., and Pozzoli, L. (1990). Assessment of human exposure to atrazine through the determination of free atrazine in urine. *Bulletin of Environmental Contamination and Toxicology* 44, 1-7.

Dauterman, W. C., and Muecke, W. (1974). *In vitrometabolism of atrazine by rat liver*. *Pesticide Biochemistry and Physiology* 4, 212-219.

Erickson, M. D., Frank, C. W., and Morgan, D. P. (1979). Determination of *s*-triazine herbicide residues in urine: Studies of excretion and metabolism in swine as a model to human metabolism. *Journal of Agricultural and Food Chemistry* 27, 743-746.

Guddewar, M. B., and Dauterman, W. C. (1979). Studies on a glutathione S-transferase preparation from mouse liver which conjugates chloro-*s*-triazine herbicides. *Pesticide Biochemistry and Physiology* 12, 1-9.

Ikonen, R., Kangas, J., and Savolainen, H. (1988). Urinary atrazine metabolites as indicators for rat and human exposure to atrazine. *Toxicology Letters* 44, 109-112.

Koskinen, W. C., and Clay, S. A. (1997). Factors affecting atrazine fate in north central U.S. soils. *Reviews of Environmental Contamination and Toxicology* 151, 117-165.

Lamoureux, G. L., Simoneaux, B., and Larson, J. (1998). The metabolism of atrazine and related 2-chloro-4,6-bis(alkylamino)-*s*-triazines in plants. In *Triazine Herbicides: Risk Assessment*, L. G. Ballantine, J. E. McFarland and D. S. Hackett, eds. (Washington, D.C.: American Chemical Society).

Ma, L., and Selim, H. M. (1996). Atrazine retention and transport in soils. *Reviews of Environmental Contamination and Toxicology* 145, 129-173.

Muir, D., and Baker, E. B. (1978). The disappearance and movement of three triazine herbicides and several of their degradation products in soil under field conditions. *Weed Research* 18, 111-120.

Uses and Usage

- Aspelin, A. L. (1997). Pesticides Industry Sales and Usage, 733-R-97-002, USEPA, ed. (Washington, D.C.: Biological and Economic Analysis Division, Office of Pesticide Programs, Office of Prevention, Pesticides and Toxic Substances, U.S. Environmental Protection Agency).
- Gianessi, L. P., and Anderson, J. E. (1995). Pesticide Use in New York Crop Production (Washington, D.C.: National Center for Food and Agricultural Policy).
- Gianessi, L. P., and Anderson, J. E. (1995). Pesticide Use in U.S. Crop Production (Washington, D.C.: National Center for Food and Agricultural Policy).
- HSDB. (1996). Atrazine; Hazardous Substances Database (TOXNET: National Library of Medicine).
- Meister, R. T. (1998). Pesticide Dictionary; Atrazine. In Farm Chemicals Handbook '98, R. T. Meister, ed. (Willoughby, OH: Meister Publishing Company), pp. C34-35.
- Miles, C. J., and Pfeuffer, R. J. (1997). Pesticides in canals of south Florida. Archives of Environmental Contamination and Toxicology 32, 337-345.
- Norvartis. (1998). AAtrex Nine-0® label: Norvartis/Ciba-Geigy).
- Ribaldo, M. O., and Bouzaher, A. (1994). Atrazine: environmental characteristics and economics of management (Washington, D.C.: United States Department of Agriculture - Economic Research Service).
- Solomon, K. R., Baker, D. B., Richards, R. P., Dixon, K. R., Klaine, S. J., La Point, T. W., Kendall, R. J., Weisskopf, C. P., Giddings, J. M., Giesy, J. P., Hall, L. W., Jr., and Williams, W. M. (1996). Ecological risk assessment of atrazine in North American surface waters. Environmental Toxicology and Chemistry 15, 31-76.
- USEPA (1994). Atrazine, Simazine and Cyanazine; Notice of Initiation of Special Review. Federal Register 59, 60412-60443.
- WSSA. (1994). Atrazine. In Herbicide Handbook, 7th ed., W. H. Ahrens, ed. (Champaign, IL: Weed Science Society of America), pp. 20-23.

Regulatory Status

- Alavanja, M. C. R., Sandler, D. P., McMaster, S. B., Zahm, S. H., McDonnell, C. J., Lynch, C. F., Pennybacker, M., Rothman, N., Dosemeci, M., Bond, A. E., and Blair, A. (1996). The Agricultural Health Study. Environmental Health Perspectives 104, 362-369.
- BNA (1997). Drinking Water; Changes predicted in final regulation to protect ground water from herbicides. Environmental Reporter 28, 317-318.
- Kello, D. (1989). WHO drinking water quality guidelines for selected herbicides. Food Additives and Contaminants 6 Supplement 1, S79-S85.
- Ribaldo, M. O., and Bouzaher, A. (1994). Atrazine: environmental characteristics and economics of management (Washington, D.C.: United States Department of Agriculture - Economic Research Service).
- USEPA (1994). Atrazine, Simazine and Cyanazine; Notice of Initiation of Special Review. Federal Register 59, 60412-60443.
- USEPA. (1998). Atrazine, Tolerances and Exemptions from Tolerances for Pesticide Chemicals in or on Raw Agricultural Commodities, 40 CFR 180.220. In Code of Federal Regulations, pp. 348-349.
- USEPA. (1996). Drinking Water Regulations and Health Advisories, EPA 822-B-96-002 (Washington, D.C.: Office of Water, U.S. Environmental Protection Agency).
- USEPA (1991). Notice of MCL for Atrazine (56 FR 3526). January 10, 1991. Federal Register.

WHO. (1987). Environmental Health Criteria 70; Principles for the safety assessment of food additives and contaminants in food (Geneva: World Health Organization).

Evidence of Breast Cancer in Humans

- Blair, A., Dosemeci, M., and Heineman, E. (1993). Cancer and other causes of death among male and female farmers from twenty-three states. American Journal of Industrial Medicine 23, 729-742.
- Kettles, M., Browning, S. R., Prince, T. S., and Horstman, S. W. (1997). Triazine herbicide exposure and breast cancer

incidence: An ecologic study of Kentucky counties. *Environmental Health Perspectives* 105, 1222-1227.

Lynge, E. (1985). A follow-up study of cancer incidence among workers in manufacture of phenoxy herbicides in Denmark. *British Journal of Cancer* 52, 259-270.

Vineis, P., Terracini, B., Ciccone, G., Cignetti, A., Colombo, E., Donna, A., Maffi, L., Pisa, R., Ricci, P., Zanini, E., and Comba, P. (1986). Phenoxy herbicides and soft-tissue sarcomas in female rice weeders. A population based case-referent study. *Scandinavian Journal of Work, Environment and Health* 13, 9-17.

Wiklund, K., and Dich, J. (1994). Cancer risks among female farmers in Sweden. *Cancer Causes and Control* 5, 449-457.

Evidence of Mammary Cancer in Animals

Chapin, R. E., Stevens, J. T., Hughes, C. L., Kelce, W. R., Hess, R. A., and Daston, G. P. (1996). Symposium overview: Endocrine modulation of reproduction, paper presented by: Eldridge, J. C., Stevens, J. T., Wetzel, L. T., Tisdel, M. O., Brechenridge, C. B., McConnell, R. F., and Simpkins, J. W. , Atrazine: mechanisms of hormonal imbalance in female SD rats. *Fundamental and Applied Toxicology* 29, 1-17.

Hazelette, J. R., and Green, J. D. (1988). Atrazine Technical: 91-Week Oral Carcinogenicity Study in Mice, MRID No. 40431302, Study No. 842120, October 30, 1987 (Testing Facility: Division of Toxicology/Pathology, Ciba-Geigy Corp.).

Innes, J. R. M., Ulland, B. M., Valerio, M. G., Petrucelli, L., Fishbein, L., Hart, E. R., Pallotta, A. J., Bates, R. R., Falk, H. L., Gart, J. J., Klein, M., Mitchell, I., and Peters, J. (1969). Bioassay of pesticides and industrial chemicals for tumorigenicity in mice: a preliminary note. *Journal of the National Cancer Institute* 42, 1101-1114.

IRIS. (1998). Atrazine, CASRN 1912-24-9 (<http://www.epa.gov/ngispgm3/iris/subst/02909.htm>: EPA Integrated Risk Information Service).

Mayhew, D. A., Taylor, G. D., Smith, S. H., and Banas, D. A. (1986). Twenty-four Month Combined Oral Toxicity and Oncogenicity Study in Rats Utilizing Atrazine Technical, Study No. 410-1102, Accession No. 262714-2226, April 29, 1986 ((: Conducted by American Biogenics Corp. for Ciba-Geigy Corp.).

Pinter, A., Torok, G., Borzsonyi, M., Surjan, A., Csik, M., Kelecsenyi, Z., and Kocsis, Z. (1990). Long-term carcinogenicity bioassay of the herbicide atrazine in F344 rats. *Neoplasma* 37, 533-544.

Stevens, J. T., Breckenridge, C. B., Wetzel, L. T., Gillis, J. H., Luempert III, L. G., and Eldridge, J. C. (1994). Hypothesis for mammary tumorigenesis in Sprague-Dawley rats exposed to certain triazine herbicides. *Journal of Toxicology and Environmental Health* 43, 139-153.

Thakur, A. K., Wetzel, L. T., Tisdel, M. O., and Stevens, J. T. (1992). Comparison of the potential effects of atrazine on the development of mammary, pituitary, uterine, and ovarian tumors in Sprague-Dawley and Fischer 344 female rats [abstract no. 1490]. *The Toxicologist* 12, 380.

Thakur, A. K., Wetzel, L. T., Voelker, R. W., and Wakefield, A. E. (1998). Chapter 30, Results of a two-year oncogenicity study in Fischer 344 Rats with atrazine. In *Triazine Herbicides: Risk Assessment*, L. G. Ballantine, J. E. McFarland and D. S. Hackett, eds. (Washington, D.C.: American Chemical Society), pp. 384-398.

USEPA. (1989). Atrazine. In *Drinking Water Health Advisory: Pesticides* Lewis Publishers), pp. 43-67.

USEPA (1994). Atrazine, Simazine and Cyanazine; Notice of Initiation of Special Review. *Federal Register* 59, 60412-60443.

Weisenburger, D. D., Hickman, T. J., Patil, K. D., Lawson, T. A., and Mirvish, S. S. (1990). Carcinogenesis tests of atrazine and N-nitrosoatrazine-compounds of special interest to the Midwest, *Proceedings of the American Association for Cancer Research*, Vol. 31 [abstract 603]. *Carcinogenesis*, pp. 102.

Wetzel, L. T., Luempert III, L. G., Breckenridge, C. B., Tisdel, M. O., Stevens, J. T., Thakur, A. K., Extrom, P. J., and Eldridge, J. C. (1994). Chronic effects of atrazine on estrus and mammary tumor formation in female Sprague-Dawley and Fischer 344 rats. *Journal of Toxicology and Environmental Health* 43, 169-182.

Evidence of Cancer in Animals, non-mammary gland sites

Donna, A., Betta, P. G., Gagliardi, F., Ghiazza, G. F., Gallareto, M., and Gabutto, V. (1981). Preliminary experimental contribution to the study of possible carcinogenic activity of two herbicides containing atrazine-simazine and trifluralin as active principles. *Pathologica* 73, 707-721.

Donna, A., Betta, P. G., Robutti, F., and Bellingeri, D. (1986). Carcinogenicity testing of atrazine: preliminary report on a

13-month study on male Swiss albino mice treated by intraperitoneal administration. *Giornale Italiano di Medicina del Lavoro* 8, 119-121.

Hazelette, J. R., and Green, J. D. (1988). Atrazine Technical: 91-Week Oral Carcinogenicity Study in Mice, MRID No. 40431302, Study No. 842120, October 30, 1987 (Testing Facility: Division of Toxicology/Pathology, Ciba-Geigy Corp.).

IRIS. (1998). Atrazine, CASRN 1912-24-9 (<http://www.epa.gov/ngispgm3/iris/subst/02909.htm>: EPA Integrated Risk Information Service).

Pinter, A., Torok, G., Borzsonyi, M., Surjan, A., Csik, M., Kelecsenyi, Z., and Kocsis, Z. (1990). Long-term carcinogenicity bioassay of the herbicide atrazine in F344 rats. *Neoplasma* 37, 533-544.

Stevens, J. T., Breckenridge, C. B., Wetzel, L. T., Gillis, J. H., Luempert III, L. G., and Eldridge, J. C. (1994). Hypothesis for mammary tumorigenesis in Sprague-Dawley rats exposed to certain triazine herbicides. *Journal of Toxicology and Environmental Health* 43, 139-153.

Thakur, A. K., Wetzel, L. T., Voelker, R. W., and Wakefield, A. E. (1998). Chapter 30, Results of a two-year oncogenicity study in Fischer 344 Rats with atrazine. In *Triazine Herbicides: Risk Assessment*, L. G. Ballantine, J. E. McFarland and D. S. Hackett, eds. (Washington, D.C.: American Chemical Society), pp. 384-398.

USEPA. (1989). Atrazine. In *Drinking Water Health Advisory: Pesticides* (Lewis Publishers), pp. 43-67.

USEPA (1994). Atrazine, Simazine and Cyanazine; Notice of Initiation of Special Review. *Federal Register* 59, 60412-60443.

Evidence of Cancer in Humans, non-breast sites

Brown, L. M., Blair, A., Gibson, R., Everett, G. D., Cantor, K. P., Schumann, L. M., Burmeister, L. F., Van Lier, S. F., and Dick, F. (1990). Pesticide exposures and other agricultural risk factors for leukemia among men in Iowa and Minnesota. *Cancer Research* 50, 6585-6591.

Brown, L. M., Burnmeister, L. F., Everett, G. D., and Blair, A. (1993). Pesticide exposures and multiple myeloma in Iowa men. *Cancer Causes and Control* 4, 153-156.

Burmeister, L. F. (1990). Cancer mortality in Iowa farmers: Recent results. *American Journal of Industrial Medicine* 18, 295-301.

Cantor, K. P., Blair, A., Everett, G., Gibson, R., Burmeister, L. F., Brown, L. M., Schumann, L., and Dick, F. R. (1992). Pesticides and other agricultural risk factors for non-Hodgkin's lymphoma among men in Iowa and Minnesota. *Cancer Research* 52, 2447-2455.

Crosignani, P., and Berrino, F. (1994). Re: "Role of the herbicide atrazine in the development of non-Hodgkin's lymphoma" [letter]. *Scandinavian Journal of Work, Environment and Health* 20, 223-225.

Donna, A., Betta, P.-G., Robutti, F., Crosignani, P., Berrino, F., and Bellingeri, D. (1984). Ovarian mesothelial tumors and herbicides: A case-control study. *Carcinogenesis* 5, 941-942.

Donna, A., Crosignani, P., Robutti, F., Betta, P. G., Bocca, R., Mariani, N., Ferrario, F., Fissi, R., and Berrino, F. (1989). Triazine herbicides and ovarian epithelial neoplasms. *Scandinavian Journal of Work, Environment and Health* 15, 47-53.

Hoar, S. K., Blair, A., Holmes, F. F., Boysen, C. D., Robel, R. J., Hoover, R., and Fraumeni, J. F., Jr. (1986). Agricultural herbicide use and risk of lymphoma and soft-tissue sarcoma. *Journal of the American Medical Association* 256, 1141-1147.

Kogevinas, M., Kauppinen, T., Winkelmann, R., Becher, H., Bertazzi, P. A., Bueno-de-Mesquita, H. B., Coggon, D., Green, L., Johnson, E., Littorin, M., Lynge, E., Marlow, D. A., Mathews, J. D., Neuberger, M., Benn, T., Pannett, B., Pearce, N., and Saracci, R. (1995). Soft tissue sarcoma and non-Hodgkin's lymphoma in workers exposed to phenoxy herbicides, chlorophenols, and dioxins: two nested case-control studies. *Epidemiology* 6, 396-402.

Sathiakumar, N., Delzell, E., Austin, H., and Cole, P. (1992). A follow-up study of agricultural chemical production workers. *American Journal of Industrial Medicine* 21, 321-330.

Sathiakumar, N., Delzell, E., and Cole, P. (1996). Mortality among workers at two triazine herbicide manufacturing plants. *American Journal of Industrial Medicine* 29, 143-151.

Weisenburger, D. D. (1990). Environmental epidemiology of non-Hodgkin's lymphoma in eastern Nebraska. *American Journal of Industrial Medicine* 18, 303-305.

- Zahm, S., Weisenburger, D. D., Saal, R. C., Vaught, J. B., Babbitt, P. A., and Blair, A. (1993). The role of agricultural pesticide use in the development of non-Hodgkin's lymphoma in women. *Archives of Environmental Health* 48, 353-358.
- Zahm, S. H., and Blair, A. (1994). Author's reply, Re: "Role of the herbicide atrazine in the development of non-Hodgkin's lymphoma" [letter]. *Scandinavian Journal of Work, Environment and Health* 20, 225-226.
- Zahm, S. H., Weisenburger, D. D., Babbitt, P. A., Saal, R. C., Cantor, K. P., and Blair, A. (1988). A case-control study of non-Hodgkin's lymphoma and agricultural factors in eastern Nebraska [abstract]. *American Journal of Epidemiology* 128, 901.
- Zahm, S. H., Weisenburger, D. D., Babbitt, P. A., Saal, R. C., Vaught, J. B., Cantor, K. P., and Blair, A. (1990). A case-control study of non-Hodgkin's lymphoma and the herbicide 2,4-dichlorophenoxyacetic acid (2,4-D) in eastern Nebraska. *Epidemiology* 1, 349-356.
- Zahm, S. H., Weisenburger, D. D., Cantor, K. P., Holmes, F. F., and Blair, A. (1993). Role of the herbicide atrazine in the development of non-Hodgkin's lymphoma. *Scandinavian Journal of Work, Environment and Health* 19, 108-114.

Evidence of Estrogenicity

Balaguer, P., Joyeux, A., Denison, M. S., Vincent, R., Gillesby, B. E., and Zacharewski, T. (1996). Assessing the estrogenic and dioxin-like activities of chemicals and complex mixtures using *in vitro* recombinant receptor-reporter gene assays. *Canadian Journal of Physiology and Pharmacology* 74, 216-222.

Connor, K., Howell, J., Safe, S., Chen, I., Liu, H., Berhane, K., Sciarretta, C., and Zacharewski, T. (1998). Chapter 33, Failure of chloro-s-triazine-derived compounds to induce estrogenic responses *in vivo* and *in vitro*. In *Triazine Herbicides: Risk Assessment*, L. G. Ballantine, J. E. McFarland and D. S. Hackett, eds. (Washington, D.C.: American Chemical Society), pp. 424-431.

Eldridge, J. C., Tennant, M. K., Wetzel, L. T., Breckenridge, C. B., and Stevens, J. T. (1994). Factors affecting mammary tumor incidence in chlorotriazine-treated female rats: Hormonal properties, dosage, and animal strain. *Environmental Health Perspectives* 102 (Suppl 11), 29-36.

Soto, A. M., Sonnenschein, C., Chung, K. L., Fernandez, M. F., Olea, N., and Serrano, F. O. (1995). The E-Screen Assay as a tool to identify estrogens: An update on estrogenic environmental pollutants. *Environmental Health Perspectives* 103, 113-122.

Tennant, M. K., Hill, D. S., and Eldridge, J. C. (1994). Chloro-s-triazine antagonism of estrogen action: limited interaction with estrogen receptor binding. *Journal of Toxicology and Environmental Health* 43, 197-211.

Tennant, M. K., Hill, D. S., and Eldridge, J. C. (1994). Possible antiestrogenic properties of chloro-s-triazines in rat uterus. *Journal of Toxicology and Environmental Health* 43, 183-196.

Tran, D. Q., Kow, K. Y., McLachlan, J. A., and Arnold, S. F. (1996). The inhibition of estrogen receptor-mediated responses by chloro-s-triazine-derived compounds is dependent on estradiol concentration in yeast. *Biochemical and Biophysical Research Communications* 227, 140-146.

Evidence of Hormone Disruption

Babic-Gojmerac, T., Kniewald, Z., and Kniewald, J. (1989). Testosterone metabolism in neuroendocrine organs in male rats under atrazine and deethylatrazine influence. *Journal of Steroid Biochemistry* 33, 141-146.

Bradlow, H. L., Davis, D. L., G., L., Sepkovic, D., and Tiwari, R. (1995). Effects of pesticides on the ratio of 16a/2-Hydroxyestrone: A biologic marker of breast cancer risk. *Environmental Health Perspectives* 103, 147-150.

Kniewald, J., Peruzovic, M., Gojmerac, T., Karmela, M., and Kniewald, Z. (1987). Indirect influence of s-triazines on rat gonadotrophic mechanism at early postnatal period. *Journal of Steroid Biochemistry* 27, 1095-1100.

McDougal, A., and Safe, S. (1998). Induction of -hydroxyestrone metabolite ratios in MCF-7 cells by pesticides, carcinogens, and antiestrogens does not predict mammary carcinogens. *Environmental Health Perspectives* 106, 203-206.

Tezak, Z., Simic, B., and Kniewald, J. (1992). Effect of pesticides on oestradiol-receptor complex formation in rat uterus cytosol. *Food and Chemical Toxicology* 30, 879-885.

Commentary on Reproductive Aging Theory

Buckley, A. B., Putnam, C. W., and Russell, D. H. (1988). Prolactin as a mammalian mitogen and tumor promoter.

Advances in Enzyme Regulation 27, 371-391.

Chapin, R. E., Stevens, J. T., Hughes, C. L., Kelce, W. R., Hess, R. A., and Daston, G. P. (1996). Symposium overview: Endocrine modulation of reproduction, paper presented by: Eldridge, J. C., Stevens, J. T., Wetzel, L. T., Tisdel, M. O., Brechenridge, C. B., McConnell, R. F., and Simpkins, J. W. , Atrazine: mechanisms of hormonal imbalance in female SD rats. Fundamental and Applied Toxicology 29, 1-17.

Cooper, R. L., Conn, P. M., and Walker, R. F. (1980). Characterization of the LH surge in middle-aged female rats. Biology of Reproduction 23, 611-615.

Cooper, R. L., Goldman, J. M., and Rehnberg, G. L. (1986). Neuroendocrine control of reproductive function in the aging female rodent. Journal of the American Geriatrics Society 34, 735-751.

Cooper, R. L., Stoker, T. E., Goldman, J. M., Parrish, M. B., and Tyrey, L. (1996). Effect of atrazine on ovarian function in the rat. Reproductive Toxicology 10, 257-264.

Cooper, R. L., Stoker, T. E., McElroy, W. K., and Hein, J. (1998). Atrazine (ATR) disrupts hypothalamic catecholamines and pituitary function (abstract no. 789). Society of Toxicology 1998 Annual Meeting, 160.

Cooper, R. L., and Walker, R. F. (1979). Potential therapeutic consequences of age-dependent changes in brain physiology. Interdisciplinary Topics in Gerontology 15, 54-76.

Eldridge, J. C., McConnell, R. F., Wetzel, L. T., and Tisdel, M. O. (1998). Appearance of mammary tumors in atrazine-treated rats: probable mode of action involving strain-related control of ovulation and estrous cycling. In Triazine Herbicides: Risk Assessment, L. G. Ballantine, J. E. McFarland and D. S. Hackett, eds. (Washington, D.C.: Amcerican Chemcial Society), pp. 414-423.

Eldridge, J. C., Tennant, M. K., Wetzel, L. T., Breckenridge, C. B., and Stevens, J. T. (1994). Factors affecting mammary tumor incidence in chlorotriazine-treated female rats: Hormonal properties, dosage, and animal strain. Environmental Health Perspectives 102 (Suppl 11) , 29-36.

Finch, C. E., Felicio, L. S., Mobbs, C. V., and Nelson, J. F. (1984). Ovarian and steroid influences on neuroendocrine aging processses in female rodents. Endocrine Review 5, 467-497.

Huang, H. H., and Meites, J. (1975). Reproductive capacity of aging female rats. Neuroendocrinology 17, 289-295.

Huang, H. H., Steger, R. W., Bruni, J. F., and Meites, J. (1978). Patterns of sex steroid and gonadotropin secretion in aging female rats. Endocrinology 103, 1855-1859.

LeFevre, J., and McClintock, M. K. (1988). Reproductive senescence in female rats: a longitudinal study of individual differences in estrous cycles and behavior. Biology of Reproduction 38, 780-789.

Lu, K. H., Hopper, B. R., Vargo, T. M., and Yen, S. S. C. (1979). Chronological changes in sex steroid, gonadotropin and prolactin secretion in aging female rats displaying different reproductive states. Biology of Reproduction 21, 193-203.

Meites, J. (1972). Relation of prolactin and estrogen to mammary tumorigenesis in the rat. Journal of the National Cancer Institute 48, 1217-1224.

Nelson, J. F., Felicio, L. S., Randall, P. K., Sims, C., and Finch, C. E. (1982). A longitudinal study of estrous cyclicity in aging C57BL/6J Mice: I. Cycle frequency, length and vaginal cytology. Biology of Reproduction 27, 327-339.

Nequin, L. G., Alvarez, J., and Schwartz, N. B. (1979). Measurement of serum steroid and gonadotropin levels and uterine and ovarian variables throughout 4 day and 5 day estrous cycles in the rat. Biology of Reproduction 20, 659-670.

Simpkins, J. W., Eldridge, J. C., and Wetzel, L. T. (1998). Chapter 31, Role of strain-specific reproductive patterns in the appearance of mammary tumors in atrazine-treated rats. In Triazine Herbicides: Risk Assessment, L. G. Ballantine, J. E. McFarland and D. S. Hackett, eds. (Washington, D.C.: American Chemical Society), pp. 399-413.

Stevens, J. T., Breckenridge, C. B., Wetzel, L. T., Gillis, J. H., Luempert III, L. G., and Eldridge, J. C. (1994). Hypothesis for mammary tumorigenesis in Sprague-Dawley rats exposed to certain triazine herbicides. Journal of Toxicology and Environmental Health 43, 139-153.

Thakur, A. K., Wetzel, L. T., Voelker, R. W., and Wakefield, A. E. (1998). Chapter 30, Results of a two-year oncogenicity study in Fischer 344 Rats with atrazine. In Triazine Herbicides: Risk Assessment, L. G. Ballantine, J. E. McFarland and D. S. Hackett, eds. (Washington, D.C.: American Chemical Society), pp. 384-398.

Wetzel, L. T., Luempert III, L. G., Breckenridge, C. B., Tisdel, M. O., Stevens, J. T., Thakur, A. K., Extrom, P. J., and Eldridge, J. C. (1994). Chronic effects of atrazine on estrus and mammary tumor formation in female Sprague-Dawley and Fischer 344 rats. *Journal of Toxicology and Environmental Health* 43, 169-182.

Wise, P. (1984). Estrodiol-induced daily luteinizing hormone and prolactin surges in young and middle-aged rats: correlations with age-related changes in pituitary responsiveness and catecholamine turnover rates in microdissected brain areas. *Endocrinology* 115, 801-809.

Wise, P. M. (1987). The role of the hypothalamus in aging of the female reproductive system. *Journal of Steroid Biochemistry* 27, 713-719.

Wise, P. M., Scarbrough, K., Larson, G. H., Lloyd, J. M., Weiland, N. G., and Chiu, S. (1991). Neuroendocrine influences on aging of the female reproductive system. *Frontiers in Neuroendocrinology* 12, 323-356.

Effects on Reproduction

Heindel, J. J., Chapin, R. E., Gulati, D. K., George, J. D., Price, C. J., Marr, M. C., Myers, C. B., Barnes, L. H., Fail, P. A., Grizzle, T. B., Schwetz, B. A., and Yang, R. S. H. (1994). Assessment of the reproductive and developmental toxicity of pesticide/fertilizer mixtures based on confirmed pesticide contamination in California and Iowa groundwater. *Fundamental and Applied Toxicology* 22, 605-621.

Munger, R., Isacson, P., Hu, S., Burns, T., Hanson, J., Lynch, C. F., Cherryholmes, K., Van Dorpe, P., and Hausler, W. J., Jr. (1997). Intrauterine growth retardation in Iowa communities with herbicide-contaminated drinking water supplies. *Environmental Health Perspectives* 105, 308-314.

Peters, J. W., and Cook, R. M. (1973). Effects of atrazine on reproduction in rats. *Bulletin of Environmental Contamination and Toxicology* 9, 301-304.

Evidence of Mutagenicity and Genotoxicity

Biradar, D. P., and Rayburn, A. L. (1995). Flow cytogenetic analysis of whole cell clastogenicity of herbicides found in groundwater. *Archives of Environmental Contamination and Toxicology* 28, 13-17.

Brusick, D. J. (1994). An assessment of the genetic toxicity of atrazine: Relevance to human health and environmental effects. *Mutation Research* 317, 133-144.

Clements, C., Ralph, S., and Petras, M. (1997). Genotoxicity of selected herbicides in *Rana catesbeiana* tadpoles using the alkaline single-cell gel DNA electrophoresis (Comet) assay. *Environmental and Molecular Mutagenesis* 29, 277-288.

Dunkelberg, H., Fuchs, J., Hengstler, J. G., Klein, E., Oesch, F., and Strüder, K. (1994). Genotoxic effects of the herbicides alachlor, atrazine, pendimethaline, and simazine in mammalian cells. *Bulletin of Environmental Contamination and Toxicology* 52, 498-504.

Eisenbeis, S. J., Lynch, D. L., and Hampel, A. E. (1981). The Ames mutagen assay tested against herbicides and herbicide combinations. *Soil Science* 131, 44-47.

Gebel, T., Kevekorder, S., Pav, K., Edenharder, R., and Dunkelberg, H. (1997). *In vivo* genotoxicity of selected herbicides in the mouse bone-marrow micronucleus test. *Archives of Toxicology* 71, 193-197.

Kappas, A. (1988). On the mutagenic and recombinogenic activity of certain herbicides in *Salmonella typhimurium* and in *Aspergillus nidulans*. *Mutation Research* 204, 615-621.

Lusby, A. F., Simmons, Z., and McGuire, P. M. (1979). Variation in mutagenicity of s-triazine compounds tested on four *Salmonella* strains. *Environmental Mutagenesis* 1, 287-290.

Plewa, M. J., Wagner, E. D., Gentile, G. J., and Gentile, J. M. (1984). An evaluation of the genotoxic properties of herbicides following plant and animal activation. *Mutation Research* 136, 233-245.

Ribas, G., Frenzilli, G., Barale, R., and Marcos, R. (1995). Herbicide-induced DNA damage in human lymphocytes evaluated by the single-cell gel electrophoresis (SCGE) assay. *Mutation Research* 344, 41-54.

Ruiz, M. J., and Marzin, D. (1997). Genotoxicity of six pesticides by *Salmonella* mutagenicity test and SOS chromotest. *Mutation Research* 390, 245-255.

Yoder, J., Watson, M., and Benson, W. W. (1973). Lymphocyte chromosome analysis of agricultural workers during extensive occupational exposure to pesticides. *Mutation Research* 21, 335-340.

Evidence of Tumor Promotion

Dieter, M. P., and Garnett, J. (1993). Use of F344 rat leukemia transplant model to test the farm chemical pesticides, parathion, chlorpyrifos and atrazine for potential tumorigenicity. Proceedings of the American Association for Cancer Research 34, 173.

N-Nitrosamine Formation

Bontoyan, W. R., Law, M. W., and Wright, D. P., Jr. (1979). Nitrosamines in agricultural and home-use pesticides. Journal of Agricultural and Food Chemistry 27, 631-635.

Janzowski, C., Klein, R., and Preussmann, R. (1980). Formations of *N*-nitroso compounds of the pesticides atrazine, simazine, and carbaryl with nitrogen oxides. In *N*-Nitroso Compounds: Analysis, Formation and Occurrence (IARC Scientific Publications No. 31), E. A. Walker, L. Griciute, M. Castegnaro and M. Borzsonyi, eds. (Lyon: IARC), pp. 329-339.

Kearney, P. C., Oliver, J. E., Helling, C. S., Isensee, A. R., and Kontson, A. (1977). Distribution, movement, persistence, and metabolism of *N*-nitrosoatrazine in soils and a model aquatic ecosystem. Journal of Agricultural and Food Chemistry 25, 1177-1181.

Meisner, L. F., Roloff, B. D., and Belluck, D. A. (1993). In vitro effects of N-nitrosoatrazine on chromosome breakage. Archives of Environmental Contamination and Toxicology 24, 108-112.

Biomarkers

Catenacci, G., Maroni, M., Cottica, D., and Pozzoli, L. (1990). Assessment of human exposure to atrazine through the determination of free atrazine in urine. Bulletin of Environmental Contamination and Toxicology 44, 1-7.

Hill, R. H., Jr., Barr, J., Driskell, W. J., Patterson, D. G., Needham, L. L., and Bond, A. E. (1996). Biologic monitoring for pesticide residues among farm families: Atrazine exposure (abstract no. 135) (New Orleans, LA: American Chemical Society).

Ikonen, R., Kangas, J., and Savolainen, H. (1988). Urinary atrazine metabolites as indicators for rat and human exposure to atrazine. Toxicology Letters 44, 109-112.

Environmental Fate: Persistency in Soil

Buchanan, G. A., and Hiltbold, A. E. (1973). Performance and persistence of atrazine. Weed Science 21, 413-416.

Harris, C. I. (1967). Fate of 2-chloro-s-triazine herbicides in soil. Journal of Agricultural and Food Chemistry 15, 157-162.

Hurle, K., and Kibler, E. (1976). The effect of changing moisture conditions on the degradation of atrazine in soil. In 1976 British Weed Control Conference (13th British Weed Control Conference) (Hotel Metropole, Brighton, England: British Crop Protection Council), pp. 627-633.

Khan, S. U. (1978). Kinetics of hydrolysis of atrazine in aqueous fulvic acid solution. Pesticide Science 9, 39-43.

Koskinen, W. C., and Clay, S. A. (1997). Factors affecting atrazine fate in north central U.S. soils. Reviews of Environmental Contamination and Toxicology 151, 117-165.

Levy, J., and Chesters, G. (1995). Simulation of atrazine and metabolite transport and fate in a sandy-till aquifer. Journal of Contaminant Hydrology 20, 67-88.

Ma, L., and Selim, H. M. (1996). Atrazine retention and transport in soils. Reviews of Environmental Contamination and Toxicology 145, 129-173.

Muir, D., and Baker, E. B. (1978). The disappearance and movement of three triazine herbicides and several of their degradation products in soil under field conditions. Weed Research 18, 111-120.

Redondo, M. J. (1997). Dissipation and distribution of atrazine, simazine, chlorpyrifos, and tetradifon residues in citrus orchard soil. Archives of Environmental Contamination and Toxicology 32, 346-352.

Ribaudo, M. O., and Bouzaher, A. (1994). Atrazine: environmental characteristics and economics of management (Washington, D.C.: United States Department of Agriculture - Economic Research Service).

Rodriguez, C. J., and Harkin, J. M. (1997). Degradation of atrazine in subsoils, and groundwater mixed with aquifer sediments. Bulletin of Environmental Contamination and Toxicology 59, 728-735.

Sorenson, B. A., Wyse, D. L., Koskinen, W. C., Buhler, D. D., W.E., L., and Jorgenson, M. D. (1993). Formation and movement of 14C-atrazine degradation products in a sandy loam soil under field conditions. *Weed Science* 41, 239-245.

Winkelmann, D. A., and Klaine, S. J. (1991). Degradation and bound residue formation of four atrazine metabolites, deethylatrazine, desisopropylatrazine, dealkylatrazine and hydroxyatrazine, in a western Tennessee soil. *Environmental Toxicology and Chemistry* 10, 347-354.

Environmental Fate: Groundwater Contamination

Bartowiak, D., Newhart, K., Pepple, M., Troiano, J., and Weaver, D. (1995). Sampling for Pesticide Residues in California Well Water; 1995 Update of the Well Inventory Data Base (Sacramento, CA: California Environmental Protection Agency, Dept. of Pesticide Regulation).

Buhler, D. D., Randall, G. W., Koskinen, W. C., and Wyse, D. L. (1993). Atrazine and alachlor losses from subsurface tile drainage of a clay loam soil. *Journal of Environmental Quality* 22, 583-588.

Jayachandran, K., Steinheimer, T. R., Somasundaram, L., Moorman, T. B., Kanwar, R. S., and Coats, J. R. (1994). Occurrence of atrazine and degradates as contaminants of subsurface drainage and shallow groundwater. *Journal of Environmental Quality* 23, 311-319.

Kolpin, D. W., Barbash, J. E., and Gillion, R. J. (1998). Occurrence of pesticides in shallow groundwater of the United States: Initial results from the National Water-Quality Assessment Program. *Environmental Science and Technology* 32, 558-566.

Kolpin, D. W., Kalkhoff, S. J., Goolsby, D. A., Sneed-Fahrer, D. A., and Thurman, E. M. (1997). Occurrence of selected herbicides and herbicide degradation products in Iowa's ground water. *Ground Water* 35, 679-688.

Kolpin, D. W., Sneed-Fahrer, D., Hallberg, G. R., and Libra, R. D. (1997). Temporal trends of selected agricultural chemicals in Iowa's groundwater, 1982-1995: Are things getting better? *Journal of Environmental Quality* 26, 1007-1017.

Kolpin, D. W., Thurman, E. M., and Goolsby, D. A. (1996). Occurrence of selected pesticides and their metabolites in near-surface aquifers of the Midwestern United States. *Environmental Science and Technology* 30, 335-340.

Muir, D. C., and Baker, B. E. (1976). Detection of triazine herbicides and their degradation products in tile-drain water from fields under intensive corn (maize) production. *Journal of Agricultural and Food Chemistry* 24, 122-125.

Norvartis. (1998). AAatrex Nine-0® label: Norvartis/Ciba-Geigy).

Pionke, H. B., Glotfelty, D. E., Lucas, A. D., and Urban, J. B. (1988). Pesticide contamination of groundwaters in the Mahantango Creek Watershed. *Journal of Environmental Quality* 17, 76-84.

Ritter, W. F. (1990). Pesticide contamination of ground water in the United States - a review. *Journal of Environmental Science and Health* 25, 1-29.

Thurman, E. M., Kolpin, D. W., Goolsby, D. A., and Meyer, M. T. (1998). Chapter 17, Source and transport of desethylatrazine and desisopropylatrazine to groundwater of the midwestern United States. In *Triazine Herbicides: Risk Assessment*, L. G. Ballantine, J. E. McFarland and D. S. Hackett, eds. (Washington, D.C.: American Chemical Society), pp. 189-207.

USEPA (1994). Atrazine, Simazine and Cyanazine; Notice of Initiation of Special Review. *Federal Register* 59, 60412-60443.

USEPA. (1990). National Pesticide Survey: Summary Results of EPA's National Survey of Pesticides in Drinking Water Wells, PB 91-125765 (Washington, D.C.: United States Environmental Protection Agency, Office of Water, Office of Pesticides and Toxic Substances).

Wall, G. R., Riva-Murray, K., and Phillips, P. J. (1998). Water Quality in the Hudson River Basin, New York and Adjacent States, 1992-95, USGS Circular no. 1165 (Denver, CO: U.S. Geological Survey Information Services).

Wilson, M. P., Savage, E. P., Adrian, D. D., Aaronson, M. J., Keefe, T. J., Hamar, D. H., and Tessari, J. T. (1987). Groundwater transport of the herbicide, atrazine, Weld county, Colorado. *Bulletin of Environmental Contamination and Toxicology* 39, 807-814.

WRI. (1989). Assessment of Pesticides in Upstate New York Groundwater (Ithaca, NY: Water Resources Institute, Center for Environmental Research, Cornell University).

Environmental Fate: Surface Water Contamination

Frank, R., Logan, L., and Clegg, B. S. (1991). Pesticide and polychlorinated biphenyl residues in waters at the mouth of the Grand, Saugeen, and Thames Rivers, Ontario, Canada, 1986-1990. *Archives of Environmental Contamination and Toxicology* 21, 585-595.

Gruessner, B., and Watzin, M. C. (1995). Patterns of herbicide contamination in selected Vermont streams detected by enzyme immunoassay and gas chromatography/mass spectrometry. *Environmental Science and Technology* 29, 2806-2813.

Miles, C. J., and Pfeuffer, R. J. (1997). Pesticides in canals of south Florida. *Archives of Environmental Contamination and Toxicology* 32, 337-345.

Pantone, D. J., Potter, K. N., Torbert, H. A., and Morrison, J., J.E. (1996). Atrazine loss in runoff from no-tillage and chisel-tillage systems on a Houston black clay soil. *Journal of Environmental Quality* 25, 572-577.

Phillips, P. J., Wall, G. R., Eckhardt, D. A., Freehafer, D. A., and Rosenmann, L. (1998). Pesticide Concentrations in Surface Waters of New York State in Relation to Land Use-1997, USGS Water Resources Investigation Report 98-4101 (<http://ny.usgs.gov/projects/nypesticides/reports/WRIR4101.html>: U.S. Geological Survey), pp. 1-5.

Solomon, K. R., Baker, D. B., Richards, R. P., Dixon, K. R., Klaine, S. J., La Point, T. W., Kendall, R. J., Weisskopf, C. P., Giddings, J. M., Giesy, J. P., Hall, L. W., Jr., and Williams, W. M. (1996). Ecological risk assessment of atrazine in North American surface waters. *Environmental Toxicology and Chemistry* 15, 31-76.

USEPA (1994). Atrazine, Simazine and Cyanazine; Notice of Initiation of Special Review. *Federal Register* 59, 60412-60443.

Wall, G. R., and Phillips, P. J. (1997). Pesticides in surface waters of the Hudson River basin, New York and Adjacent states (U.S. Geological Survey Fact Sheet no. FS 238-96).

Wall, G. R., and Phillips, P. J. (1997). Pesticides in surface waters of the Hudson River basin-Mohawk River subbasin (U.S. Geological Survey Fact Sheet no. F2-237-96).

Environmental Fate: Community Water Systems

Baker, D. B. (1983). Herbicide Contamination in Municipal Water Supplies of Northwestern Ohio [draft final report] (Tiffin, Ohio: Heidelberg College).

Balu, K., Holden, P. W., Johnson, L. C., and Cheung, M. W. (1998). Chapter 19, Summary of Ciba Crop Protection groundwater monitoring study for atrazine and its degradation products in the United States. In *Triazine Herbicides: Risk Assessment*, L. G. Ballantine, J. E. McFarland and D. S. Hackett, eds. (Washington, D.C.: American Chemical Society), pp. 227-238.

Clarkson, J. R., Golden, K. A., Tierney, D. P., and Christensen, B. R. (1996). Human exposure to atrazine and simazine via ground and surface drinking water: Update I, January 25, 1996, no. 2852.0480 (Greensboro, N.C.: Ciba Crop Protection and Ciba-Geigy Corp.).

Funari, E., Brambilla, A. L., Camoni, I., Canuti, A., Cavallaro, A., Chierici, S., Cialella, G., Donati, G., Jaforte, A., Prandi, L., Salamana, V., Silano, V., and Zapponi, G. A. (1988). Extensive atrazine pollution of drinking water in the Lombardia region and related public health aspects. *Biomedical and Environmental Sciences* 1, 350-355.

Tierney, D. P., Clarkson, J. R., Christensen, B. R., Golden, K. A., and Hines, N. A. (1998). Chapter 21, Exposure to the herbicide atrazine and simazine in drinking water. In *Triazine Herbicides: Risk Assessment*, L. G. Ballantine, J. E. McFarland and D. S. Hackett, eds. (Washington, D.C.: American Chemical Society), pp. 252-265.

Environmental Fate: Rainwater Levels

Capel, P. D., Ma, L., Schroyer, B. R., Larson, S. J., and Gilchrist, T. A. (1995). Analysis and detection of the new corn herbicide acetochlor in river water and rain. *Environmental Science and Technology* 29, 1702-1705.

Nations, B. K., and Hallberg, G. R. (1992). Pesticides in Iowa precipitation. *Journal of Environmental Quality* 21, 486-492.

Wu, T. L. (1981). Atrazine residues in estuarine water and the aerial deposition of atrazine into Rhode River, Maryland. *Water, Air, and Soil Pollution* 15, 173-184.

Food Residues and Cancer Risk

FDA. (1998). Food and Drug Administration Pesticide Program, Residue Monitoring 1996 (<http://vm.cfsan.fda.gov/~dms/pest96rep.html>: Food and Drug Administration).

Pylypiw, H. M., Jr., Bugbee, G. J., and Frink, C. R. (1993). Uptake of pre-emergent herbicides by corn: Distribution in plants and soil. *Bulletin of Environmental Contamination and Toxicology* 50, 474-478.

Simoneaux, B. J., Hackett, D. S., Bray, L. D., and Thalaker, F. (1998). Chapter 10, Magnitude and nature of (s)-triazine residues in foodstuffs as predicted from radiolabeled studies on selected animals and plants. In *Triazine Herbicides: Risk Assessment*, L. G. Ballantine, J. E. McFarland and D. S. Hackett, eds. (Washington, D.C.: American Chemical Society), pp. 104-114.

USEPA (1994). Atrazine, Simazine and Cyanazine; Notice of Initiation of Special Review. *Federal Register* 59, 60412-60443.

Occupational Exposure

Lunchick, C., and Selman, F. (1998). Chapter 14, The assessment of worker exposure to atrazine and simazine: A tiered approach. In *Triazine Herbicides: Risk Assessment*, L. G. Ballantine, J. E. McFarland and D. S. Hackett, eds. (Washington, D.C.: American Chemical Society), pp. 141-155.

USEPA (1994). Atrazine, Simazine and Cyanazine; Notice of Initiation of Special Review. *Federal Register* 59, 60412-60443.

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