

**Office of Arid Lands Studies
College of Agriculture
The University of Arizona**

Faculty and Staff

Publications and Presentations

2000 - 2001

Compiled by William Becker

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Peer Review Journal Publications

- Ayerza, R. and **W.E. Coates**. An Omega-3 Fatty Acid Enriched Chia Diet: Influence on Egg Fatty Acid Composition, Cholesterol and Oil Content. *Canadian Journal of Animal Science*, 79:53-58.
- Ayerza, R. and **W.E. Coates**. Evaluation of Kenaf Production in Subtropical Argentina. *Tropical Science*, 39:85-90.
- Casanova, L.M., C.P. Gerba and **M.M. Karpiscak**. 2001. Chemical and microbial characterization of household graywater. *Journal of Environmental Science Health A36(4)*:395-401.
- Coates, W.E.** Evaluation of Cutting Devices for Hesperaloe Harvesting. *ASAE Applied Engineering in Agriculture*, 15(3):183-187.
- Coloma, Azucena Gonzalez, Fernando Valencia, Nuria Martin, **Joseph J. Hoffmann**, Louis K. Hutter, J. Alberto Marco, and Matias Reina. 2002. Silphinene Sesquiterpenes as Model Insect Antifeedants. *Journal Chemical Ecology*, 28 (1), 117-129.
- Clay, G.R., and **S.E. Marsh**. 2001. Monitoring of Forest Transitions Using Scanned Ground Photographs as a Primary Data Source. *Photogrammetric Engineering and Remote Sensing*, 67(3):319-330.
- Drake, Samuel**. 2001. Modeling Phytogeographic Change With Climate Change in the San Pedro River Watershed, Southeastern Arizona. Submitted (to *PE&RS Special Issue*).
- Falabi, J.A., C.P. Gerba and **M.M. Karpiscak**. 2001. Giardia and Cryptosporidium removal from wastewater by a duckweed (*Lemna gibba* L.) covered pond. *Letters in Applied Microbiology*.
- Furbacher, T.R. and **A.A. Leslie Gunatilaka**. 2001. Catalytic Inhibition of Topoisomerase II by Demethylzeylasterone, a 6-Oxophenolic Triterpenoid from *Kokoona zeylanica*. *Journal of Natural Products*, Volume 64, Number 10, pages 1294-1296.
- Gortares, P., L. Castro, J.E. Naranjo, F. Manshadi, C.P. Gerba, **M.M. Karpiscak** and R.J. Freitas. 2002. Microbiological water quality in irrigation water and its impact on fresh vegetables. *American Society of Microbiology*.
- Gunatilaka, A.A.L.**, J.M. Berger, R. Evans, J.S. Miller, J.H. Wisse, K.M. Neddermann, I. Bursuker and D.G.I. Kingston. 2001. Isolation, Synthesis, and Structure-Activity Relationships of Bioactive Benzoquinones from *Miconia lepidota* from Suriname Rainforest. *Journal of Natural Products*, Volume 64, pages 2-5.
- Haseltine, M., M.B. Baker, and **B. Hutchinson**. 2001. Technology Transfer of Watershed Management Information. Submitted to *AIH Journal, Hydrological Science and Technology*. (accepted; in press)

- Hutchinson, B.S.** 2001. The Essential Electronic Agricultural Library (TEEAL): A tool for agricultural education and research in developing countries (a case study). *Journal for the Association for International Agricultural and Extension Education*. (in press)
- Hutchinson, B.S.** and G. Ruyle. 2001. Partnering for Better Management of Western Rangelands: Using Web Technologies to Get the Word Out. *Submitted to the Journal of Agricultural and Food Information*.
- Hutchinson, C.F., J.D. Unruh** and C.J. Bahre. 2000. Land use vs. climate as causes of vegetation change: a study in southeastern Arizona. *Global Environmental Change* 10:47-55.
- Karpiscak, M.M., G.W. France, K.J. DeCook, R.G. Brittain, K.E. Foster** and S.B. Hopf. 2001. Casa del Agua: Water conservation demonstration house - 1986-1998. *Journal of American Water Resources Association*, 37(5): 1237-1248.
- Karpiscak, M.M., L.R. Sanchez, R.J. Freitas** and C.P. Gerba. 2001. Removal of bacterial indicators and pathogens from dairy wastewater by a treatment system. *Journal of Water Science and Technology*, 44(11-12):183-190.
- Karpiscak, M.M., L.R. Whiteaker, J.F. Artiola, K.E. Foster.** 2001. Nutrient and heavy metal uptake and storage in constructed wetland systems in Arizona. *Journal of Water Science and Technology*, 44(11-12): 455-462.
- Kepner, W.G., C.J. Watts, C.M. Edmonds, J.K. Maingi, **S.E. Marsh**, and G. Luna. 2000. A Landscape Approach for Detecting and Evaluating Change in a Semi-Arid Environment. *Journal of Environmental Monitoring and Assessment*, 64: 179-195.
- Krasilnikov, P.V. and **J.A. Tabor**. Perspectives in Utilitarian Ethnopedology. *Geoderma* (Accepted 2001, publication pending)
- Maingi, J.K. and **S.E. Marsh**. Changes in Hydrology and Floodplain Vegetation due to River Basin Development on the Tana River, Kenya. *Journal of Arid Environments*, (Accepted Pending Revisions 2000).
- Maingi, J.K. and **S.E. Marsh**. Environmental Change and Ecology of the Tana Riverine Forests, Kenya. In Preparation for Submission to: *Journal of Plant Ecology*. (2000).
- Maingi, J.K. and **S.E. Marsh**. 2001. Assessment of Environmental Impacts of River Basin Development on the Riverine Forests of Eastern Kenya Using Multi-temporal Satellite Data. *International Journal of Remote Sensing*, 22(14): 2701-2729.
- Maingi, J.K. and **Marsh, S.E.** 2002. Quantifying Hydrologic Impacts Following Dam Construction along the Tana River, Kenya. *Journal of Arid Environments*, 50(1): 53-79.
- Marsh, S.E., C. Wallace, J. Walker** and J. Miller. Correlation of Vegetation Indices and Landscape Characteristics to the Distribution of the Endangered Sonoran Pronghorn Antelope. In Preparation for submission to: *Photogrammetric Engineering and Remote Sensing*.

- McLaughlin, S.P.** 2000. Properties of paper made from fibers of *Hesperaloe funifera* (Agavaceae). *Economic Botany* 54: 192-196.
- McLaughlin, S.P.** and R.R. Williams. Carbohydrates and flowering in *Hesperaloe funifera* (Koch) Trel. (samandoque). *Boletin de la Sociedad Botanica de Mexico*. Accepted October 26, 1999.
- McLaughlin, S.P.**, R.R. Williams, A.R. Anouti, D.A. Ravetta, and J.M. Nelson. 2000. Allocation of resources to flowering and fruit production in *Hesperaloe funifera* (Agavaceae). *Journal of Arid Environments* 45: 99-110.
- McLaughlin, S. P.** Removing flower stalks increases leaf biomass in *Hesperaloe funifera*. Submitted to *Journal of Arid Environments*, October 2001.
- McLaughlin, S. P.** and R. R. Williams. 2000 (Issued 2001). Carbohydrates and flowering in *Hesperaloe funifera* (Koch) Trel. (samandoque). *Boletin de la Sociedad Botanica de Mexico*, 66: 67-72.
- McLaughlin, S. P.**, E. L. Geiger, and J. E. Bowers. 2001. A flora of the Appleton-Whittell Research Ranch, northeastern Santa Cruz County, Arizona. *Journal of the Arizona-Nevada Academy of Science*, 33(2): 113-131.
- Mujoo, K.V., A.V. Haridas, **J.J. Hoffmann**, G.A. Waechter, L.K. Hutter, M.E. Blake, Y. Lu, G.B. Mills and J.U. Guttermann. Triterpenoid saponins from *Acacia victoria* (Benth) decrease tumor cell proliferation, induce apoptosis and inhibit phosphatidylinositol-3-kinase, NF-kB, and inducible nitric oxide synthase. *Can.Res.* (Submitted November 2001).
- Nissanka, A.P.K., V. Karunaratne, B.M.R. Bandara, V. Kumar, T. Nakanishi, M. Nishi, A. Inada, L.M.V. Tillekeratne, D.S.A. Wijesundera and **A.A.L. Gunatilaka**. 2001. Antimicrobial Alkaloids from *Zanthoxylum tetraspermum* and *caudatum*. *Phytochemistry*, Volume 56, pages 857-861.
- Nokes, R.L., C.P. Gerba and **M.M. Karpiscak**. 2001. Microbial water quality improvement during combined septic tank and subsurface wetland treatment. *Journal of Environmental Health*.
- Pan, M.**, J. J. Hoffmann, **S. P. McLaughlin**, T. H. Corbett, J. P. Horwitz, C. K. Greishaber, and F. A. Valeriote. Cucurbitacins from *Eriastrum densiflorum*. *Fitoterapia* (Submitted 2001).
- Pan, M.**, A. L. Hayden, **S. P. McLaughlin**, N. E. Jacobsen, J. J. Hoffmann, T. H. Corbett, C. K. Greishaber and F. A. Valeriote. Furanocoumarins from the roots of *Angelica lineariloba* Gray. *Fitoterapia* (Submitted 2001).

- Quanrud, D.M., **M.M. Karpiscak**, K.E. Lansey, R.A. Arnold. 2001. Behavior of organic carbon during subsurface wetland treatment in the Sonoran Desert. *Journal of Water Science and Technology*, 44(11-12):267-272.
- Quinonez, M. de J., **M.M. Karpiscak**, E.D. Ellman, C.P. Gerba. 2001. Removal of pathogenic and indicator microorganisms by a constructed wetland receiving untreated domestic wastewater. *Journal of American Water Resources Association*.
- Reynolds, C.A., M. Yitayew, D.C. Slack, **C.F. Hutchinson**, A. Huete, M.S. Petersen. 2000. Estimating crop yields and production by integrating the FAO Crop Specific Water Balance model with real-time satellite data and ground-based ancillary data. *International Journal of Remote Sensing* 21(18): 3487-3508.
- Shamir, E., **M.M. Karpiscak**, T.L. Thompson, R.J. Freitas, J. Zauderer. 2001. Nitrogen accumulation in a constructed wetland for dairy wastewater treatment. *Journal of the American Water Resources Association* 37(2):315-325.
- Skirvin, S.M., S.E. Drake, J.K. Maingi, W.G. Kepner, **S.E. Marsh**. An Accuracy Assessment of 1997 Landsat Thematic Mapper Derived Land Cover for the Upper San Pedro Watershed (US/Mexico). *U.S. Environmental Protection Agency, Office of Research and Development Publication: EPA/600/R-00/097*, 15pp. (also to be available at: <http://www.epa.gov/crdlvweb/land-sci/>)
- Valeriotte, F., C.K. Grieshaber, J. Media, Pietraszkewicz; and **J. Hoffmann, M. Pan, S. McLaughlin**. 2002. Discovery and Development of AntiCancer Agents from Plants. *Journal of Experimental Therapeutics and Oncology* (accepted for publication November 2001).
- Waechter, G.A., S.G. Franzblau, G. Montenegro, **J.J. Hoffmann**, W.M. Maiese and B.N. Timmermann. 2001. Inhibition of Mycobacterium tuberculosis Growth by Saringosterol from *Lessonia nigrescens*. *Journal of Natural Products*, 64:1463-4.
- Waechter, G.A., **J.J. Hoffmann**, T. Furbacher, M.E. Blake, and B.N. Timmerman. Antibacterial and Antifungal Flavanones from *Eusenhardtia texana*. *Phytochemistry* 52: 1469-1471. (Publication not out at the end of 1999).
- Weiss, E., **S.E. Marsh** and E.S. Pfirman. 2001. Application of NOAA-AVHRR NDVI Time-Series Data to Assess Changes in Saudi Arabia's Rangelands. *International Journal of Remote Sensing*, 22(6):1005-1027.
- Wijeratne, E.M.K.**, B.D. Lankananda, Y. Tezuka, T. Nagaoka, and **A.A.Leslie Gunatilaka**. 2001. Dimeric Aporphine Alkaloids of *Phoenicanthus obliqua* from Sri Lanka. *Journal of Natural Products*, Volume 64, Number 11, pages 1465-1467.

Other Journal Publications, Pamphlets, Reviews, and Abstracts

Coates, W.E. 1999. There Could be a Good Egg in Your Future. *Senior Edition, The Journal of Healthful Aging*, 12(1):2.

Gunatilaka, A.A.L. 2001. Review of the Book *Alkaloids Chemical & Biological Perspectives*, Edited by Dr. S.W. Pelletier and published by Elsevier. Review/Revisions, Published. *Journal of Natural Products*, Volume 64, Number 9, page 1256.

Hutchinson, B. Reviewed manuscript titled, "The Causes and Consequences of Desertification in Kuwait: A case study and a possible rehabilitation plan" for the *Kuwait Journal of Science and Engineering* (June 2001).

Hutchinson, B. and G. Ruyle. "Improved Management of Public Land Grazing Allotments: An Information Resource." Submitted as a contributed paper for the Society for Rangeland Management Annual Meeting to be held February 17-23, 2001 in Kailua-Kona, Hawaii. (accepted but not presented due to travel conflicts)

Hutchinson, C.F. 2000. John Wesley Powell and the New West. *Cosmos* 2000 27-33.

MacArthur, R., D. Osgood, **B. Hutchinson**, E. Pfirman, and B. Orr. Alternative Knowledge Delivery Systems. Submitted abstract for a poster session at the 3rd International Conference for Geospatial Information in Agriculture and Forestry, November 2001, Denver, CO. (accepted)

Books, Book Chapters, and Conference Proceedings

- Baker, M.B., **B. Hutchinson**, E. Pfirman, M. Haseltine, and J. Schalaus. 2001. Management of Arid and Semi-Arid Watersheds: Decision-Making Tools and Technology Transfer. Hydrology and Water Resources in Arizona and the Southwest. Proceedings of the 2001 Meetings. Vol. 31: 7-12.
- Hutchinson, B.S.** 2001. Students' Technological Expertise and the Influence on Faculty and Curriculum. Invited book chapter for a proposed Suny Press book on the impact of technology on higher education.
- Hutchinson, B.** and A. Powell, eds. 2001. *Using the Agriculture Literature*. New York: Marcel Dekker, Inc. (invited by publisher to determine content, identify authors, and coordinate and edit chapters, and write the preface and introduction) (in press).
- Hutchinson, B.**, J. Pfander and M. Haseltine. 2001. *Rangeland Management Information on the Web. Arizona's Ranchers Guide*. Tucson, AZ: Cooperative Extension. (accepted long ago; still in potential production)
- McLaughlin, S.P.** Exotic species in the western United States: putting the Sonoran Floristic Province into perspective. In B. Tellman (ed.), *Exotic species in the Sonoran Desert*. In Press.

Reports

Coates, W.E. 1999. Measuring PM10 Dust in Cotton. College of Agriculture, Agricultural Experiment Station Research Report, 1998.

Drake, Samuel. 2001. Workshops for State, Local and Tribal Governments: Final Report.
<http://aria.arizona.edu/slg/NASAreionalapplications.html>

Hutchinson, B. Report on the National Agricultural Library - 2001. Blue Ribbon Interagency Panel for Assessment of the National Agricultural Library. Submitted to the Secretary of Agriculture, USDA.

Edited Volumes and Newsletters

Waser, K. 2000. *Arid Lands Newsletter*, Volumes 47, 48.

Waser, K. 2001. *Arid Lands Newsletter*, Volumes 49,50.

Presentations, Talks, and Posters

- Baker, M., **B. Hutchinson**, E. Pfirman, and M. 2001. Haseltine. Management of Arid and Semi-Arid Watersheds: Decision-making and technology transfer. Presented at the Arizona-Nevada Academy of Science, Hydrology Section (April 14, 2001).
- Baker, M., M. Haseltine, and **B. Hutchinson**. 2001. Transfer of Watershed Management Information. Presented at the Annual Meeting and 20th Anniversary Conference, Hydrologic Science: Challenges for the 21st Century, Bloomington, Minnesota (October 16, 2001).
- Brochini, Claudia, L.M. Canfield and **A.A.L. Gunatilaka**. Beta-carotene Oxidation Products with Anticancer Activity. Arizona Cancer Center 8th Annual Science Fair, 2000.
- Canfield, L.M., C.B. Brochini and **A.A.L. Gunatilaka**. Large-scale Production, Purification and Chemical Characterization of B-carotene Oxidation Products that Inhibit Growth and Metabolism of Cancer Cells. American Institute for Cancer Research 10th Annual Research Conference, Aug.-Sept. 2000, Abstract #38.
- Coates, W.E.**, R. Ayerza and D. Ravetta. 1999. Guayule Rubber and Latex Content - Variation with Time. Diversity in Agricultural Products - New Crops & New Markets meeting. Eugene, Oregon. October 17-21.
- Coates, W.E.** and J.A. Hilbert. 1999. Liquid and Solid Balast on FWD Tractors. ASAE International Meeting. Toronto, Canada. July 18-21.
- Drake, Samuel**. Poplar forest conservation in the Tarim River basin and sand stabilization along the Taklimakan Desert Road, Xinjiang, China. Presented at Tucson, Arizona on 11/21/2001. ARSC seminar series.
- Drake, Samuel**. A Terrestrial Ecology Study to Assess the Impact of Man's Activities on Rangeland Resources -- Saudi Arabia. Research Report, Published. Final Report, presented to the Meteorology and Environmental Protection Administration (MEPA), Kingdom of Saudi Arabia, April 2001.
- Foster, K.E.** Drylands can be Breadbaskets: Breaking the Links Between Land Degradation, Food Insecurity and Water Scarcity. Presented at Washington, DC on 6/19/2001. Spoke on the International Arid Lands Consortium program.
- Gunatilaka, A.A.L.**, T.R. Furbacher, L.M. Rafferty, H. Singh, J.W. LeFevre, J.J. Hoffmann and S.P. McLaughlin. Search for Potential Mechanism-based Anticancer Agents from Desert Plants. Northwest and Rocky Mountain Joint American Chemical Society Regional Meeting. June 2000, Idaho, Abstract #159.
- Gunatilaka, A.A.L.**, E.M.K. Wijeratne, B.D. Lankananda, Y. Tezuka and T. Nagaoka. Alkaloids of *Phoenicanthus obliqua*. Northwest and Rocky Mountain Joint American Chemical Society Regional Meeting. June 2000, Idaho, Abstract #68.

- Gunatilaka, A.A.L.** Anticancer Agents from Plants and Microorganisms. Presented at Institute of Fundamental Studies, Sri Lanka on 6/18/2001.
- Gunatilaka, A.A.L.** Chemist's War Against Cancer. Presented at Oxford Campus, University of Mississippi on 4/23/2001. Sigma-Xi Mississippi Chapter.
- Gunatilaka, A.A.L.** Natural Products from Arizona. Presented at Arizona Cancer Center on 9/17/2001. Workshop on "A Practical Guide to Cancer Drug Discovery and Development" organized by the Arizona Cancer Center.
- Gunatilaka, A.A.L.** Search for Anticancer Drugs from Desert Plants and Associate Microorganisms. Presented at Flinn Foundation, Phoenix on 2/26/2001. Third Symposium on Cancer Drug Development in Arizona organized by the Arizona Cancer Center.
- Gunatilaka, A.A.L.** Search for Anticancer Agents from Desert Plants and Associated Microorganisms. Presented at University of Mississippi on 4/24/2001. National Center for Natural Products Research.
- Gunatilaka, A.A.L.** Search for Anticancer Agents from Desert Flora and Microorganisms. Presented at University of Peradeniya, Sri Lanka on 6/15/2001. Department of Chemistry.
- Gunatilaka, A.A.L.** Search for Anticancer Drugs from Rhizosphere Microorganisms. Presented at Indian Institute of Science, Bangalore on 6/29/2001.
- Gunatilaka, A.A.L.** Studies on PC SPES, A Clinically Effective Alternative Therapy for Advanced Prostate Cancer. Presented at Lake Tahoe, CA on 9/8/2001. 8th CaPCURE Retreat.
- Hoffman, J.** Invited Paper at the International Conference on Advances in Cancer Research in Amsterdam in November, 2000. The Development of a New Paradigm in Drug Discovery by Fred Valerioate and Joseph Hoffmann (Presented by F. Valeriote).
- Hutchinson, B.** 2001. Using the Web to Understand Public Land Issues. Presentation to the Arizona Farm Bureau Federation, Phoenix, Arizona (September 13, 2001).
- Hutchinson, B.** 2001. Information Collection and Dissemination Component: Arizona Center for Phytochemistry Research (ACPRx). Presented to NIH representatives at the UA College of Pharmacy (March 7, 2001).
- Hutchinson, B.** 2001. Information Management and Dissemination Component Activities. Presentation to the ICBG Bioactive Agents of Dryland Biodiversity of Latin America Project Annual Meeting, Puerto Madryn, Argentina (October 3, 2000).
- Hutchinson, B.** and D. Jones. 2001. AgNIC: The Next Generation. Presented to the administrators for the College of Agriculture and Life Sciences and for the UA Libraries (February 6, 2001).

- Hutchinson, B.** and G. Ruyle. 2001. Internet Capabilities Under Development for Range Management. Presented at the first Synergy II Workshop, Tucson, Arizona (June 19, 2001).
- Hutchinson, B.** and G. Ruyle. 2001. Partnering for Better Management of Western Rangelands: Using Web Technologies to Get the Word Out. Presented at the USAIN Conference, North Carolina State University (April 23, 2001).
- Hutchinson, B.** and G. Ruyle. 2001. Using the Web to Inform the Public Lands Grazing Debate. Presented at the Western Regional Joint Summer Meetings, Keystone, Colorado (July 16, 2001).
- Hutchinson, B.** and G. Ruyle. 2001. Geospatial Applications on the AgNIC Managing Rangelands and Synergy II Web Sites. Presented at the second Synergy II Workshop, Tucson, Arizona (October 20, 2001).
- Hutchinson, B.** and G. Ruyle. 2001. Using the Web to Inform the Public Lands Grazing Debate. Presented at the Board Meeting of the Policy Analysis Center for Western Public Lands, Las Vegas, Nevada (October 26, 2001).
- Hutchinson, C.F.** 2000. Famine and Famine Early Warnings: Some Contributions by Geographers. Presidential Plenary, Association of Pacific Coast Geographers. September, 2000. Arcata (invited).
- Hutchinson, C.F., **S.E. Marsh**, P. Krausman, R. Enns, L. Howery, E. Trobia, C. Wallace, J. Walker, K. Mauz, H. Boyd, H. Salazar. 2001. Assessing Wildlife Habitat and Range Utilization in Arizona Using Satellite Data. American Geophysical Union Spring Meeting, Boston, MA, May 2001.
- Kepner, W.G., S.M. Skirvin, S.E. Marsh, **S.E. Drake**, J.K. Maingi, C.M. Edmonds, C.J. Watts, and D.R. Williams. 2001. Assessing the accuracy of satellite-derived land cover using historical aerial photography, digital orthophoto quadrangles and airborne video data. Las Vegas, Nevada, December 11-13, 2001. Remote Sensing and GIS Accuracy Assessment Symposium. U.S. EPA/ORD and ASPRS.
- Marsh, S.E.**, B. Orr, P. Krausman, R. Enns, L. Howery, E. Trobia, C. Wallace, K. Mauz, H. Boyd, H. Salazar. 2001. Informing the Elk Debate: Applying NASA Earth Observing System (EOS) Data to Natural Resource Management Conflicts in the Western States. IEEE 2001 International Geoscience and Remote Sensing Symposium, Sydney, Australia, July 2001.
- Meade-Tollin, L.C., T. Turbyville, D.W. Cromey, A. Fritz, and **L. Gunatilaka**. In Vitro Models for Human Angiogenesis and Anticancer Drug Discovery. Presented at Baltimore, MD on 4/13/2001 by Meade-Tollin. Annual Meeting of the National Organization for the Professional Advancement of Black Chemists and Chemical Engineers.

- McLaughlin, S. P.** 2001. Flower-stalk removal increases leaf biomass production in *Hesperaloe funifera*. 5th National Symposium New Crops & New Uses: Strength in Diversity. Atlanta, GA, November 12, 2001 [Submitted]. Proceedings to be published in a professional journal.
- Skirvin, S.M., S.E. Drake, M.P. McClaran, **S.E. Marsh** and D.M. Meko, 2000. Climate Change and Land Tenure: Potential Impacts on Vegetation and Development in the San Pedro River Watershed, Southeastern Arizona. In Proceedings 4th International Conference on Integrating GIS and Environmental Modeling (GIS/EM4), September 2-8, 2000, Banff, Canada, 13pp, at (<http://www.Colorado.edu/research/cires/banff/upload/249/>). [Invited Presentation]
- Skirvin, S.M., **S.E. Drake**, M.P. McClaran, **S.E. Marsh**, and D. Meko. 2001. Potential effects of climate change on the vegetation in the San Pedro River watershed, southeastern Arizona. Tucson, Arizona, April 23-25, 2001. Predicting hydrologic, geologic and biologic responses to a drier and warmer climate in the desert Southwest. (<http://geology.wr.usgs.gov/sw-workshop/all-abstracts.pdf>)
- Skirvin, S.M., **S.E. Drake**, M.P. McClaran, **S.E. Marsh**, and D. Meko. 2001. Assessment of potential effects of climate change on the vegetation in the San Pedro River watershed, southeastern Arizona. Presented at ArcGIS Southwest Users Group Conference, Tucson, Arizona, October 24-26 2001.
- Thiam, A.K., **S.E. Marsh**, J. Walker, E.P. Rodriguez, D. Rautenkranz, L. Christel, S. Drake, B. Eiswerth, M. Farah, K. Larson and S. Shupe, 2000. Assessing the Impacts of Land-Use in Six African Cities. In Proceedings 28th International Symposium on Remote Sensing of Environment, March 27-31 2000, Cape Town, South Africa, pp. 6-15-- 6-18. [Invited Presentation]
- Turbyville, T., K. Wijeratne, D. Bigelow, J. Coleman, Z. Zhang, R. DiSilvestro, A. Kerschen, A. Harlan, L. Pierson, H. VanEtten, L. Canfield and **L. Gunatilaka**. Search for Anti-cancer Agents from Rhizosphere Microflora or Desert Plants. Arizona Cancer Center 8th Annual Science Fair, 2000.
- Turbyville, T., **K. Wijeratne**, A. Fritz, L. Whitesell and **L. Gunatilaka**. Preliminary Mechanistic Studies on Quadron Derivatives, Anticancer Metabolites from a Sonoran Desert Rhizosphere Fungus *Aspergillus terreus*. Arizona Cancer Center 9th Annual Science Fair, 9/11/2001.
- Valdez-Zamudio, D., A. Castellanos-Villegas and **S.E. Marsh**, 2000. Land Cover Change in Central Sonora, Mexico. In Proceedings USDA Forest Service Proceedings (RMRS-P-13) Conference on Land Stewardship in the 21st Century: The Contributions of Watershed Management, March 13-16, 2000, Tucson, Arizona, pp. 349-351. [Invited Presentation]
- Wijeratne, K., G.X. Zhou**, T. Turbyville, Z. Zhang, S. Schreiber, J. Coleman, D. Bigelow, A. Kerschen, D. Cooper, A. Fritz, M. Raymond, L. Pierson, H. VanEtten, L. Canfield, R. Dorr, L. Meade-Tollin, L. Whitesell and L. Gunatilaka. Search for Anti-cancer Agents

from Rhizosphere Microflora of Desert Plants. Arizona Cancer Center 9th Annual Science Fair, 2001.

Wijeratne, K., G.X. Zhou, T. Turbyville, Z. Zhang, S. Shreiber, J. Coleman, D. Bigelow, A. Kerschen, D. Cooper, A. Fritz, M. Raymond, L. Pierson, H. VanEtten, L. Canfield, R. Dorr, L. Meade-Tollin, L. Whitesell, and **L. Gunatilaka**. 2001. Search for Anti-cancer Agents from Rhizosphere Microflora of Desert Plants. Presented at Arizona Cancer Center on 10/17/2001. Symposium on Bridging Disciplines: The Key to Biomedical Research and Economic Development in the 21st Century organized by the Arizona Disease Control Research Commission and the Flinn Foundation.

Zhou, G., T. Turbyville, **K. Wijeratne**, J. Liang, A. Kerschen, L. Whitesell, L. Canfield, L. Meade-Tollin and L. Gunatilaka. Studies on PC-SPES: A Herbal Remedy for Advanced Prostate Cancer with Reported Clinical Efficacy. Arizona Cancer Center 9th Annual Science Fair, 2001.

Zhou, G.X., T. Turbyville, K. Wijeratne, J.Y. Liang, A. Kerschen, L. Whitesell, L. Canfield, L. Meade-Tollin, and L. Gunatilaka. 2001. Studies on PC-SPES: An Herbal Remedy for Advanced Prostatic Cancer with Reported Clinical Efficacy. Bridge Disciplines: The key to biomedical research and economic development in the 21st Century - A symposium, October 17-18, 2001.

Web Pages
Designed and Maintained by the Arid Lands Information Center

---- Arizona AgNIC Rangeland Management:

<http://ag.arizona.edu/agnic/range.html>, including special sections on NEPA, Clean Water Act, and NRCS Range Site Guides.

---- Arizona Vegetable Crop Production Group (COA Extension):

<http://ag.arizona.edu/extension/programs/vegetables/program.html>

---- Bioactive Agents from Dryland Biodiversity of Latin America:

<http://ag.arizona.edu/OALS/ICBG/bio-home.html>.

---- Improved Management of Public Land Grazing Allotments: An information resource.

<http://ag.arizona.edu/vbarv/index.html>.

---- International Arid Lands Consortium:

<http://ialeworld.org>

---- Office of Arid Lands Studies, Arid Lands Information Center Information Service, and *Arid Lands Newsletter* collection of web sites:

<http://ag.arizona.edu/OALS/oals/oals.html>.

---- Soils of Arid Regions of the United States and Israel.

<http://ag.arizona.edu/OALS/IALC/Soils/home.html>

---- U.S. Agricultural Information Network:

<http://usain.org>

---- University Development Linkages Project:

<http://ag.arizona.edu/OALS/oals/proj/linkages/chillink.html>

---- Watershed Management in the Southwest: With information from the Beaver Creek Biosphere Reserve:

<http://ag.arizona.edu/OALS/watershed/index.html>

---- WALTER - Web GIS Development Server:

<http://walter.arid.arizona.edu/>

---- WALTER - A Model for Wildfire Alternatives:

<http://www.ispe.arizona.edu/epastar/>

---- Arid Lands Newsletter - semiannual newsletter:

<http://ag.arizona.edu/OALS/ALN/ALNHome.html>

---- Arid Lands Information Center and Online catalog - provides access to the ALIC document collection.

<http://ag.arizona.edu/OALS/oals/alic/alic.html>

---- Arid Lands Information Resources - an envisioned International Arid Lands Information System:

<http://ag.arizona.edu/OALS/oals/alic/resources/resources.html>

---- AgNIC (University of Arizona): Managing Rangelands

<http://ag.arizona.edu/agnic/>

---- Managing Rangelands/Ecological Site Guides - provides access to the Natural Resources Conservation Service's ecological site guides for Arizona.

<http://ag.arizona.edu/agnic/siteguides/guides.html>

---- ICBG Biodiversity Conservation Project - project of the NIH International Cooperative Biodiversity Groups Program:

<http://ag.arizona.edu/OALS/ICBG/bio-home.html>

---- The Arizona Center for Phytomedicine Research (ACPRx) - This recently established Center was at the University of Arizona, is one of four national Botanical Centers funded by the National Center of Complementary and Alternative Medicine (NCCAM) of the National Institutes of Health (NIH). ALIC is in the process of developing the Center's Web site. (site will be "live" by November 2001)

---- International Arid Lands Consortium (IALC):

<http://ialeworld.org/>

---- Malawi Environmental Monitoring Programme (MEMP): (completed)

<http://ag.arizona.edu/OALS/malawi/Malawi.html>

---- Office of Arid Lands Studies - the Web site for the parent institution of the Arid Lands Information Center.

<http://ag.arizona.edu/OALS/oals/oals.html>

---- Soils of Arid Regions of the U.S. and Israel - IALC-funded project (1st phase completed):

<http://ag.arizona.edu/OALS/IALC/soils/home.html>

---- United Nations Environment Programme, UN Convention to Combat Desertification Information Network Project:

<http://ag.arizona.edu/cgi-bin/cstccd.cgi>

---- United States Agricultural Information Network:

<http://usain.org/>

---- Urban Integrated Pest Management:

<http://ag.arizona.edu/urbanipm/home.html>

---- V-bar-V Ranch/Walker Basin Allotment (password only) - The site will become "live" in December 2001.

<http://ag.arizona.edu/vbarv/index.html>

---- Watershed Management in the Southwest - features unique tools on arid and semiarid watershed management:

<http://ag.arizona.edu/OALS/watershed/index.html>

Patents

Coates, W.E. and M. Siemens. 1998. Machine for Separating Bindings and Covers from Recyclable Paper Items. Patent Applied for by U of A.

Coates, W.E. 1998. A Device to Extract Juice and Gel from Aloe Vera Leaves. Patent disclosure submitted - no action at this time.

Arntzen, Charles J., Mary Blake Tracey, Jordan Guttermann, **Joseph J. Hoffmann**, David T. Bailey and Gamini S. Jayatilake. Triterpene Compositions and Methods for Use Thereof. Patent Pending, as of May, 1999 including revisions filed in 10/0. European patent accepted 1/3/01 as #99924348.8-2112.

Hoffmann, Joseph J. and Gerald Waechter, Antibacterial and Antifungal Flavanones from *Eysenhardtia texana*. Patent granted in late 2000 after extensive editing and argumentative discourse with patent office. Final paperwork and patent number still pending.