

Biographical Sketch for ROBERT P. ADAMS

Research Professor	2002-	Biology Dept. Baylor University
Director and Senior Botanist	2001-2002	Pacific Center for Molecular Biodiversity Bishop Museum Honolulu, HI
Director	1987-2001	Plant Biotechnology Center Baylor University
Director, DNA Bank-Net	1990-	
Director	1983-1986	Science Research Center at Salt Lake City (off-campus facility of Hardin-Simmons Univ.)
Director	1981-1883	Phytochemistry Department Native Plants, Inc. (NPI) Salt Lake City, Utah (University-Industry cooperative: Hardin-Simmons Univ.- Native Plants Inc.)
Director	1977-1981	Science Research Center at Gruver, TX (off campus facility of Hardin-Simmons University)
Associate Professor Assistant Professor	1973-1977 1969-1973	Botany & Plant Pathology Dept. Colorado State University Fort Collins, CO
Ph. D.	1969	Botany/ Biochemistry University of Texas at Austin Austin, TX
Computer Programmer	1962-1964	Control Data Corporation Palo Alto, CA
B.A. (with high honors)	1962	Math/Physics(Computer Science) University of Texas at Austin

Mid-Career Post-Doctoral Fellowship "Tissue culture, cryopreservation and DNA technology", Plant Biotechnology Institute, National Research Council of Canada, Saskatoon, Saskatchewan, 1989-90.

Sabbatical leave, "Mass Spectral Analysis of Terpenes", National Research Council of Canada, Saskatoon, Saskatchewan, 1976.

Current Research Interests: DNA sequencing, DNA Fingerprinting, allergies, flavors and fragrances, bio-active compounds, mass spectroscopy, *Juniperus* taxonomy, Macro-molecular systematics, *Cupressaceae*

Publications: Over 184 peer-reviewed technical articles, 9 books and major chapters in seven books.

Graduated with High Honors from University of Texas, 1962. Recipient of NSF Environmental and Systematic Biology Training Program trainee-ship grant for research in the summers of 1967 and 1968. Recipient of NSF Predoctoral Fellowship, 1968-1969. Nominee, Waterman Award for Outstanding Young Scientist, NSF, 1976. Adjunct Professor, Dept. of Botany, Univ. of Texas at Austin, 1981-1999. Adjunct Professor, Biology Dept., Univ. of Utah, 1984-86. Adjunct Professor, Pharmacognosy Dept. Univ. of Mississippi, 1987-1995, Museum Associate, Bishop Museum, 2002-present.

Professional and Scientific Societies:

Phytochem. Soc. of North Amer.; Bot.Soc. Amer.; Amer. Soc. Pl. Taxon.; Intrn'l Assoc. Pl. Taxon. (life); AAAS; Southwest Assoc. Nat.; Classification Soc.; Bot. Soc. Mex. (life), Intrn'l Soc. Chem. Ecol. (life).

Professional Positions:

Member, Association of Systematics Collections Council on Standards for Systematics Collections (1974-77).

Vice-Chairman, Phytochemical Section, Botanical Society of America (1973-74).

American Society of Plant Taxonomists Representative to the International Register of Computer Projects in Systematics Committee.

Chairman, Phytochemical Section, Botanical Society of America, (1977-78).

Member, DOE Review Panel, Feedstock Production from Herbaceous Biomass, October 1981.

Member, Chihuahuan Desert Research Institute Board of Scientists (1980-).

Speaker, Energy Research Advisory Board, SERI, Dept. of Energy, July 1982, Denver,

Editorial Responsibilities:

Editorial Board: BRITTONIA, American Society of Plant Taxonomists (1974-77). J. Essential Oil Research (1988-); Biochemical Systematics and Evology (1995 -).

Manuscript Reviewer for: American Journal of Botany, Brittonia, Science, Taxon, Forest Science, Systematic Botany, J. Natural Products, Phytochemistry J. Ess. Oil Res., Molecular Ecology, Biotechniques, Planta Medica, Theoretical and Applied Genetics.

Publications in peer reviewed journals

1. Adams, R. P. 1970. Seasonal variation of terpenoid constituents in natural populations of *Juniperus pinchotii* Sudw. *Phytochem.* 9(2):397-402.
2. Adams, R. P. 1970. Contour mapping and differential systematics of geographical variation. *Syst. Zool.* 19(4):385-390.
3. Adams, R. P. and B.L. Turner. 1970. Chemosystematic and numerical studies in natural populations of *Juniperus ashei* Buch. *Taxon.* 19(5):728-751.
4. Adams, R. P. 1972. Numerical analyses of some common errors in chemosystematics. *Brittonia* 24:9-21.
5. Adams, R. P. 1972. Chemosystematic and numerical studies of natural populations of *Juniperus pinchotii* Sudw. *Taxon.* 21:407-427.
6. Stack, Stephen M., M.J. Packard, and **R. P. Adams**. 1973. Ontogenetic alteration of the spindle apparatus: possible relation to chromosome pairing. *Caryologia* 26:383-388.
7. Powell, R.A. and **R. P. Adams**. 1973. Seasonal variation in the volatile terpenoids of *Juniperus scopulorum* (Cupressaceae). *Am. J. Bot.* 60:1041-1051.
8. Adams, R. P. 1973. Reevaluation of the biological status of *Juniperus deppeana* var. *sperryi* Correll. *Brittonia* 25:284-289.
9. Zanoni, T. A. and **R. P. Adams**. 1973. Distribution and synonymy of *Juniperus californica* Carr. (Cupressaceae) in Baja California, Mexico. *Bull. Torrey Bot. Club.* 100:364-367.
10. Irving, R. and **R. P. Adams**. 1973. Genetics and biosynthetic relationships of monoterpenes. IN: Recent advances Phytochemistry, Vol. 6. pp.187-214. V. C. Runeckles, Ed. Academic Press, N.Y.
11. Adams, R. P. 1974. On "Numerical chemo-taxonomy" revisited. *Taxon* 23:336-338.
12. Adams, R. P. 1974. Computer graphic plotting and mapping of data in systematics. *Taxon* 23:53-70.
13. Zanoni, T. A. and **R. P. Adams**. 1975. Southern range extension of *Juniperus scopulorum* Sarg. (Cupressaceae). *Southwest Nat.* 20:133- 136.
14. Adams, R. P. 1975. Numerical-chemosystematic studies of infraspecific variation in *Juniperus pinchotii* Sudw. *Biochem. Syst. and Ecol.* 3:71-74.
15. Adams, R. P. 1975. Gene flow versus selection pressure and ancestral differentiation in the composition of species: analysis of populational variation in *Juniperus ashei* Buch. using terpenoid data. *J. Molec. Evol.* 5:177-185.
16. Adams, R. P., D. H. Wilken, W. Klein, G. Bryant, and R. G. Walter. 1975. RAPIC, the Missing Link? *Bioscience* 25:433-437.

17. Adams, R. P. 1975. Statistical character weighting and similarity stability. *Brittonia* 27:305-316.
18. Zanoni, T. A. and R. P. Adams. 1975. The genus *Juniperus* (Cupressaceae) in Mexico and Guatemala: Numerical and morphological analysis. *Bull. Bot. Soc. of Mexico* 35:69-92.
19. Adams, R. P. and A. Hagerman. 1976. The volatile oils of young versus mature leaf oils of *Juniperus scopulorum*: Chemosystematic significance. *Biochem. Syst. and Ecol.* 4:75-79.
20. Adams, R. P. and R. A. Powell. 1976. Seasonal variation of sexual differences in the volatile oil of *Juniperus scopulorum*. *Phytochemistry* 15:509-510.
21. Adams, R. P. and W. A. Weber. 1976. An efficient method for the capture and transmission of specimen label information. *Taxon* 25:479-482.
22. Zanoni, T. A. and R. P. Adams. 1976. The genus *Juniperus* (Cupressaceae) in Mexico and Guatemala: numerical and chemosystematic analysis. *Biochem. Syst. and Ecol.* 4:147-158.
23. Adams, R. P. 1977. Chemosystematics--Analysis of populational differentiation and variability of ancestral and modern *Juniperus ashei*. *Ann. Mo. Bot. Gard.* 64:184-209.
24. Adams, R. P. and A. Hagerman. 1977. Diurnal variation in the volatile terpenoids of *Juniperus scopulorum* (Cupressaceae). *Amer. J. Bot.* 64:278-285.
25. Kelley, W. A. and R. P. Adams. 1977. Preparation of extracts from juniper leaves for electrophoresis. *Phytochemistry* 16:513-516.
26. Kelley, W. A. and R. P. Adams. 1977. Seasonal variation of isozymes in *Juniperus scopulorum* Sarg. (Cupressaceae). *Amer. J. Bot.* 64:1092-1096.
27. Kelley, W. A. and R. P. Adams. 1978. Analysis of isozyme variation in natural populations of *Juniperus ashei*. *Rhodora* 80:107-134.
28. Adams, R. P., M. Granat, L. R. Hogge and E. von Rudloff. 1979. Identification of lower terpenoids from gas-chromatograph-mass spectral data by on-line computer method. *J. Chromatographic Sci.* 17:75-81.
29. Adams, R. P. and T. A. Zanoni. 1979. The distribution, synonymy, and taxonomy of three junipers of the southwestern United States and northern Mexico. *Southwest Natl.* 24:323-330.
30. Adams, R. P. 1979. Diurnal variation in the terpenoids of *Juniperus scopulorum* (Cupressaceae)--Summer versus winter. *Amer. Bot.* 66:986-988.
31. Zanoni, T. A. and R. P. Adams. 1979. The genus *Juniperus* (Cupressaceae) in Mexico and Guatemala: Synonymy, key and distributions of the taxa. *Bull. Bot. Soc. Mex.* 38:83-131.

32. Adams, R. P., E. von Rudloff, T. A. Zanoni and L. R. Hogge. 1980. The terpenoids of an ancestral/advanced species pair of *Juniperus*. *Biochem. Syst. Ecol.* 8:35-37.
33. Adams, R. P., E. von Rudloff, L. R. Hogge, and T. A. Zanoni. 1980. The volatile terpenoids of *Juniperus monticola* f. *monticola*, f. *compacta*, and f. *orizabensis*. *J. Natl. Products* 43:417-419.
34. Adams, R. P., T. A. Zanoni, E. von Rudloff, and L. R. Hogge. 1981. The volatile oils of the southwestern U.S. and northern Mexico one-seeded junipers and their evolution. *Biochem. Syst. Ecol.* 9:93-96.
35. Adams, R. P., E. von Rudloff, T. A. Zanoni, and L. R. Hogge. 1981. The volatile terpenoids of *Juniperus blancoi* and its affinities with other entire margin junipers of North America. *J. Natl. Products* 44:21-26.
36. Adams, R. P., M. M. Palma, and W. S. Moore. 1981. Examination of the volatile oils of mature and juvenile leaves of *Juniperus horizontalis*: Chemosystematic significance. *Phytochemistry* 20:2501-2502.
37. Adams, R. P. 1982. The effects of gases from a burning coal seam on morphological and terpenoid characters in *Juniperus scopulorum* (Cupressaceae). *Southwestern Naturalist.* 27:279-286.
38. Adams, R. P. 1982. Production of liquid fuels and chemical feedstock from milkweed. *Inst. Gas Tech. Symposium Proc. Energy from Biomass and Wastes VI.* A.L. Klass, Ed. pp. 1113-1128.
39. Adams, R. P. 1982. A comparison of multivariate methods for the detection of hybridization. *Taxon* 31:646-661.
40. Schlarbaum, S. E., **R. P. Adams**, W. T. Bagley, and W. J. Wayne. 1982. Post-glacial migration and pathways of *Quercus rubra* L., northern red oak, as indicated by regional genetic variation patterns. *Silva Genetica* 31:150-158.
41. Comer, C. W., **R. P. Adams**, and D. R. Van Haverbeke. 1982. Intra- and inter-specific variation of *Juniperus virginiana* L. and *J. scopulorum* Sarg. seedlings based on volatile oil composition. *Biochem. Syst. and Ecol.* 10:297-306.
42. Adams, R. P. 1983. Intraspecific terpenoid variation in *Juniperus scopulorum*: evidence for Pleistocene refugia and recolonization in western North America. *Taxon* 32:30-46.
43. Adams, R. P. 1983. The junipers of Hispaniola: comparisons with other Caribbean species and among collections from Hispaniola. *Moscoca* 2:77-89.
44. Adams, R. P. and L. Hogge. 1983. Chemosystematic studies of the Caribbean junipers based on their volatile oil. *Biochem. Syst. Ecol.* 11:85-89.
45. Adams, R. P. and J. D. McChesney. 1983. Phytochemicals for liquid fuels and petrochemical substitutions: extractions procedures and screening results. *Econ. Bot.* 37: 207-215.
46. Adams, R. P., E. von Rudloff, and L. Hogge. 1983. Chemosystematic studies of the western North American junipers based on their volatile oils. *Biochem.*

- Syst. Ecol. 11:189-193.
47. Adams, R. P. 1983. Chemicals from arid/semi-arid land plants: whole plant utilization of milkweeds. In: Plants: The Potentials for Extracting Protein, Medicines, and Other Useful Chemicals-- Workshop Proceedings (Washington D.C.; U.S. Congress, Office of Technology Assessment, OTA-BP-F-23, September, 1983.)
 48. Adams, R. P. 1983. Selecting western U.S. species for the production of liquid fuels and chemical feedstocks. Proceedings of the Solar and Biomass Energy Workshop. J. Haynie (ed.). USDA Tifton, GA, April 26-28. pp. 156-159.
 49. Adams, R. P., M. F. Balandrin, L. Hogge, W. Craig, and S. Price. 1983. Analysis of the non-polar extractables of *Asclepias speciosa*. J. Am. Oil Chem. Soc. 60:1315-1318.
 50. Palma-Otal, M., W. S. Moore, **R. P. Adams**, and G. R. Joswiak. 1983. Genetic and biogeographical analyses of natural hybridization between *Juniperus virginiana* and *J. horizontalis* Moench. Canad. J. Bot. 61: 2733-2746.
 51. Dent, T. C. and R. P. Adams. 1983. Relationships of two isolated groups of sugar maples (*Acer saccharum* Marshall ssp. *saccharum*) in west central Oklahoma to eastern and western species. Rhodora 85: 439-456.
 52. Adams, R. P., M. F. Balandrin, and J. R. Martineau. 1984. The showy milkweed, *Asclepias speciosa*, a potential new semi-arid land crop for energy and chemicals. Biomass 4:81-104.
 53. Adams, R. P. and G. J. Seiler. 1984. Whole plant utilization of sunflowers. Biomass 4:69-80.
 54. Adams, R. P., T. A. Zanoni and L. Hogge. 1984. Analyses of the volatile oils of *Juniperus deppeana* and its infraspecific taxa: chemosystematic implications. Biochem. Syst. and Ecol. 12:23-28.
 55. Adams, R. P. and M. F. Balandrin. 1984. Application of biotechnological methods for the *in vitro* biosynthesis of bioactive saponins and propagation of endod. In: *Phytolacca dodecandra* (Endod): Final report of the international scientific workshop. Lusaka, Zambia, March 1983. A. Lemma, D. Heyneman and S. M. Silangua (eds). Tycooly International Publishing, Ltd., Dublin, Ireland.
 56. Adams, R. P., T. A. Zanoni and L. Hogge. 1984. The volatile leaf oils of *Juniperus flaccida* var. *flaccida* and var. *poblana*. J. Natl. Prod. 47:1064-1065.
 57. McChesney, J. D. and **R. P. Adams**. 1985. Co-evaluation of plant extracts as petrochemical substitutes and for biologically active compounds. Econ. Bot. 39:74-86.
 58. Klocke, J. A., M. F. Balandrin, **R. P. Adams** and E. Kingsford. 1985. Insecticidal chromenes from the volatile oil of *Hemizonia fitchii*. Chem. Ecol. 11:701-712.
 59. Ready, M. P., **R. P. Adams** and J. D. Robertus. 1984. Dodecandrin, a new

- ribosome-inhibiting protein from *Phytolacca dodecandra*. *Biochim. et Biophys. Acta* 791:314-319.
60. Clark, D. and R. P. Adams. 1985. Near-Infrared Analysis of hydrocarbon producing plant species. *Biomass* 8:1-11.
61. Adams, R. P., T. A. Zanoni and L. Hogge. 1985. The volatile leaf oils of the Junipers of Guatemala and Chiapas, Mexico: *Juniperus comitana*, *J. gamboana* and *J. standleyi*. *J. Nat. Prod.* 48:678-680.
62. Adams, R. P., T. A. Zanoni and L. Hogge. 1985. The volatile leaf oils of two rare junipers from western Mexico: *Juniperus durangensis* and *J. jaliscana*. *J. Nat. Prod.* 48:673-674.
63. Adams, R. P. 1986. Bio-Renewable sources of chemicals and fuel in the Chihuahuan Desert. in: Second Chihuahuan Desert Symposium, Proceedings, J. C. Barlow, A.M. Powell and B. N. Timmermann, eds. Chihuahuan Desert Res. Inst. Alpine, Texas. vol 11, 131-149.
64. Adams, R. P. 1986. Geographic variation in *Juniperus silicicola* and *J. virginiana* of the southeastern United States: Multivariate analyses of morphology and terpenoids. *Taxon* 35:61-75.
65. Adams, R. P., M. F. Balandrin, K. Brown, S. M. Gruel and M. Bagby. 1986. Extraction of liquid fuels and chemicals from higher land plants, Part I: Yields from western United States species. *Biomass* 9:255-292.
66. Adams, R. P. 1987. Investigation of *Juniperus* species of the United States for new sources of cedar wood oil. *Econ. Bot.* 41: 48-54.
67. Adams, R. P. C. E. Jarvis, V. Slane and T. A. Zanoni. 1987. Typification of *Juniperus barbadensis* L. and *J. bermudiana* L. and the rediscovery of *J. barbadensis* from St. Lucia, BWI. *Taxon* 36: 441-445.
68. Adams, R. P. and S. C. Price. 1987. Seasonal variation in resource allocation of extractable compounds in *Asclepias*, *Chrysothamnus* and *Grindelia*. *Biochemical Systematics & Ecology* 15:417-426.
69. Adams, R. P., A. S. Tomb and S. C. Price. 1987. Investigation of hybridization between *Asclepias speciosa* and *A. syriaca* (Asclepiadaceae) using alkanes, fatty acids and triterpenoids. *Biochemical Systematics & Ecology* 15:395-399.
70. Adams, R. P. 1987. Yields and seasonal variation of phytochemicals from *Juniperus* species in the United States. *Biomass* 12:129-139.
71. Adams, R. P., A. L. Almirall and L. Hogge. 1987. The volatile leaf oils of the junipers of Cuba: *Juniperus lucayana* Britton and *Juniperus saxicola* Britton and Wilson. *Flavour and Fragrance Journal* 2:33-36.
72. Adams, R. P., C. E. Elhardt and W. H. Scouten. 1988. Protocol for the destruction of ethidium bromide used in molecular biology. *Phytochemical Bulletin* 20(2):18-19.
73. Adams, R. P. and W. D. Clark. 1988. A cross-indexed synonymy of common components found in volatile essential oils. *Phytochemical Bulletin* 20:20-38.

74. Adams, R. P., C. A. McDaniel and F. L. Carter. 1988. Termiticial activities in the heartwood, bark/sapwood and leaves of *Juniperus* species from the United States. *Biochemical Systematics and Ecology* 16:453-456.
75. Zaroni, T. A. and **R. P. Adams**. 1989. Essential oils of plants of Hispaniola: 1. The volatile wood oil of *Cinnamodendron ekmanii* Moscosa 5:154-158.
76. Adams, R. P., K. Neisess, R. M. Parkhurst, L. P. Makhubu and L. Wolde Yohannes. 1989. Geographic variation in *Phytolacca dodecandra* (Phytolaccaceae) in Africa. *Taxon* 38(1): 17-26.
77. Adams, R. P. and G. F. Edmunds, Jr. 1989. A reexamination of the volatile leaf oils of *Pinus ponderosa* Dougl. ex. P. Lawson using ion trap mass spectroscopy. *Flavor and Fragrance Journal* 4:19-23.
78. Pyle, M. M. and *R. P. Adams*. 1989. *In situ* preservation of DNA in plant specimens. *Taxon* 38: 576-581.
79. Adams, R. P. 1989. Biogeography and evolution of the junipers of the West Indies. pp. 167-190. in: *Biogeography of the West Indies*, A. Woods, ed., Sand Hill Crane Press, Inc., 878 p.
80. Pyle, M.M. and **R. P. Adams**. 1989. Interim preservation of plant specimens for DNA utilization. *Phytochem. Bull.* 21: 5-7.
81. Adams, R. P. 1990. The volatile leaf oils of *Juniperus excelsa* Bieb. from a native stand in Greece versus *J. excelsa* cultivated at Kew, London. *J. Ess. Oil Res.* 2:45-48.
82. Clark, A. M., J. D. McChesney and **R. P. Adams**. 1990. Antimicrobial properties of heartwood, bark/sapwood and leaves of *Juniperus* species. *Phytotherapy Research* 4(1):15-19.
83. Adams, R. P., J. A. Perez de la Rosa and M. Charzaro. 1990. The volatile leaf oil of *Juniperus martinensis* Perez de la Rosa and taxonomic status. *J. Essential Oil Res.* 2:99-104.
84. Adams, R. P. 1990. The volatile leaf oil of *Juniperus foetidissima* Willd. from Greece and comparisons with oils from Turkey and the Crimea, USSR. *J. Essential Oil Res.* 2:67-70.
85. Parkhurst, R. M., D. W. Thomas, **R. P. Adams**, L. P. Makhubu, B. M. Mthupha, L. Wolde-Yohannes, G. E. Heath, J. Stobaeus and W.O. Jones. 1990. Triterpene aglycones from various *Phytolacca* populations. *Phytochemistry* 29:1171-1174.
86. Adams, R. P., E. Kendall and K. K. Kartha. 1990. Comparison of free sugars in growing and desiccated plants of the resurrection plant, *Selaginella lepidophylla* (Hook. & Grev.) Spring. *Biochemical Syst. Ecol.* 18:107-110.
87. Adams, R. P. and T. A. Zaroni. 1990. Essential oils of plants from Hispaniola: 3. The leaf oil of *Canella winterana* (Canellaceae). *J. Essential Oil Res.* 2:163-165.

88. Kendall, E. K., **R. P. Adams** and K. K. Kartha. 1990. Trehalase activities in plant tissue cultures. *Phytochemistry* 29(8): 2525-2528.
89. Adams, R. P. 1990. *Juniperus procera* of East Africa: Volatile leaf oil composition and putative relationship to *J. excelsa*. *Biochemical Syst. Ecol.* 18(4):207-210.
90. Adams, R. P., R. M. Parkhurst, L. Wolde-Yohannes and L. P. Makhubu. 1990. *Phytolacca dodecandra* (Phytolacaceae) in Africa: Geographical Variation in Chemistry. *Biochem. Syst. Ecol.* 18(6):429-433.
91. Zanoni, T. A., **R. P. Adams** and E. J. Miller. 1990. Essential oils of plants from Hispaniola: 2. The volatile leaf oil of *Pinus occidentalis* (Pinaceae). *Moscosa* 6:219-222.
92. Adams, R. P., T. A. Zanoni and E. J. Miller. 1990. Essential oils of plants from Hispaniola: 4. The volatile leaf oil of *Plethadenia granulata* (Rutaceae). *Moscosa* 6:223-225.
93. Adams, R. P. 1990. Preservation of Chihuahuan plant genomes through *in vitro* Biotechnology: DNA Bank-Net, a genetic insurance policy. in: Third Symposium on Resources of the Chihuahuan Desert Region. A., M. Powell, R. R. Hollander, J. C. Barlow, W. B. McGillivray and D. J. Schmidly, eds. Chihuahuan Desert Research Inst., Printech, Lubbock, TX.
94. Liston, A., L. H. Rieseberg, **R. P. Adams**, N. Do and Zhu Ge-lin. 1990. A method for the collection of plants for DNA and isozyme analyses and the results of a field test in Xinjiang, China. *Ann. Mo. Bot. Gard.* 77: 859-863.
95. Do, N. and **R. P. Adams**. 1991. A simple technique for removing plant polysaccharide contaminants from DNA. *Biotechniques* 10: 162-166.
96. Zanoni, T. A. and **R. P. Adams**. 1991. Essential oils of plants from Hispaniola: 5. The volatile leaf oil of *Lepechinia urbanii*. *Flavor and Fragrance J.* 6:75-77.
97. Adams, R. P. and J. R. Kistler. 1991. Hybridization between *Juniperus erythrocarpa* Cory and *Juniperus pinchotii* Sudworth in the Chisos Mountains, Texas. *Southwest. Natl.* 36: 295-301.
98. Adams, R. P. 1991. Analysis of Juniper and other forest tree oils. pp. 131-157. IN *Modern Methods of Plant Analysis, New Series: Oil and Waxes.* H.-F. Linskens and J. F. Jackson, eds. Springer-Verlag, Berlin.
99. Adams, R. P. 1991. Cedarwood oil - Analysis and properties. pp. 159-173. IN *Modern Methods of Plant Analysis, New Series: Oil and Waxes.* H.-F. Linskens and J. F. Jackson, eds. Springer-Verlag, Berlin.
100. Tucker, A. O., M. J. Maciarello, **R. P. Adams**, L. R. Landrum and T. Zanoni. 1991. Volatile leaf oils of Caribbean Myrtaceae. I. Three varieties of *Pimenta racemosa* (Miller) J. Moore of the Dominican Republic and the Commercial Bay Oil. *J. Essential Oil Res.* 3:323-329.
101. Tucker, A. O., M. J. Maciarello, **R. P. Adams**, L. R. Landrum and T. Zanoni.

1991. Volatile leaf oils of Caribbean Myrtaceae. III. *Pimenta haitiensis* (Urban) Landrum of the Dominican Republic. *J. Ess. Oil Res.* 3:471-473.
102. Adams, R. P., Nhan Do and Chu Ge-Lin. 1992. Preservation of DNA in plant specimens from endangered tropical species by desiccation. in: *Conservation of Plant Genes: DNA Banking and in vitro Biotechnology*. R. P. Adams and J. E. Adams, eds. Academic Press, NY
103. Demeke, T. and **R. P. Adams**. 1992. The effects of plant polysaccharides and buffer additives on PCR. *BioTechniques* 12(3):332-334.
104. Adams, R. P., R. K. Thappa, S. G. Agarwal, B. K. Kapahi and Y. K. Sarin. 1992. The volatile leaf oils of *Juniperus semiglobosa* Regel from India compared with *J. excelsa* M.-Bieb. from Greece. *J. Ess. Oil Res.* 4(2): 143-149.
105. Adams, R. P. and P. Weyerstahl. 1992. cis- and trans-Sabinene hydrate - Comparisons of quadrupole and ion trap mass spectra. *J. Ess. Oil Res.* 4(2): 197-200.
106. Adams, R. P. 1992. DNA Bank-Net to use DNA technology to save endangered germplasm. *Diversity* 8:23.
107. Demeke, T., **R. P. Adams** and R. Chibbar. 1992. Potential taxonomic use of random polymorphic DNA (RAPDs): A case study in *Brassica*. *Theoretical and Applied Genetics* 84: 990-994.
108. Adams, R. P. and T. A. Zanoni. 1993. *Juniperus monticola* (Cupressaceae) Revisited. *Taxon* 42: 85-86.
109. Adams, R. P. 1993. Nomenclatural note: *Juniperus coahuilensis* (Martinez) Gausson ex R. P. Adams. *Phytologia* 74:413.
110. Adams, R. P., Zhang Shao-Zhen and Chu Ge-lin. 1993. The volatile leaf oil of *Juniperus convallium* Rehd. & Wils. from Gansu, China. *Ess. Oil Res.* 5:571-573.
111. Adams, R. P. 1993. DNA Bank-Net: An International network of DNA banks and in vitro storage institutions. *AgBioTech News & Info.* 5:317N-319N.
112. Adams, R. P. and T. Demeke. 1993. Systematic relationships in *Juniperus* based on random amplified polymorphic DNAs (RAPDs). *Taxon* 42: 553-572.
113. Adams, R. P., T. Demeke and H. A. Abulfatih. 1993. RAPD DNA Fingerprints and terpenoids: Clues to past migrations of *Juniperus* in Arabia and east Africa. *Theoret. Appl. Genet.* 87: 22-26.
114. Adams, R. P., Zhang Shao-Zhen and Chu Ge-lin. 1993. The volatile leaf oil of *Juniperus saltuaria* Rehd. & Wils. from China. *J. Ess. Oil Res.* 5:676-677.
115. Adams, R. P. 1993. *Juniperus* in: *Flora of North America*. Vol 2. Pteridophytes and Gymnosperms. pp. 412-420, Nancy R. Morin, ed. Oxford University Press, NY. 475p.
116. Adams, R. P. 1993. The conservation and utilization of genes from endangered and extinct plants: DNA Bank-Net. IN: Gene conservation and

- Exploitation. J. P. Gustafson, R. Appels and P. Raven, eds. Plenum Press. NY
117. Adams, R. P. Chu Ge-lin and Zhang Shao-Zhen. 1994. The volatile leaf oils of *Juniperus przewalskii* Kom. and forma *pendula* (Cheng & L. K. Fu) R. P. Adams and Chu Ge-lin from China. JEOR 6: 17-20.
118. Adams, R. P. 1994. Geographic variation in the volatile terpenoids of *Juniperus monosperma* and *J. osteosperma*. Biochem. Syst. Ecol. 22:65-72.
119. Adams, R. P., Chu Ge-lin and Zhang Shao-Zhen. 1994. The volatile leaf oils of *Juniperus chinensis* L., *J. chinensis* var. *kaizuca* Hort. and cv. *pyramidalis* from China. J. Ess. Oil Res. 6:149-154.
120. Adams, R. P. Adams. S. Shatar, and A. D. Dembitsky. 1994. Comparison of the volatile leaf oils of *Juniperus davurica* Pall. from Mongolia with plants cultivated in Kazakhstan, Russia and Scotland. JEOR 6:217-221.
121. Demeke, T. and **R. P. Adams**. 1994. The use of PCR-RAPD Analysis in plant taxonomy and evolution. in: PCR Technology: Current Innovations, H.G. Griffin and A. M. Griffin, eds., CRC Press, Boca Raton, FL.
122. Adams, R. P. 1994. DNA Bank-Net - An Overview. in: Conservation of Plant Genes II: Utilization of Ancient and modern DNA, R. P. Adams, J. S. Miller, E. M. Golenberg and J. E. Adams, eds., Missouri Botanical Garden Press, St. Louis.
123. Demeke, T. and **R. P. Adams**. 1994. The use of RAPDs to determine germplasm collections strategies in the African species, *Phytolacca dodecandra* (Phytolaccaceae) Conservation of Plant Genes II: Utilization of Ancient and modern DNA, R. P. Adams, J. S. Miller, E. M. Golenberg and J. E. Adams, eds., Missouri Botanical Garden Press, St. Louis.
124. Adams, R. P. 1994. Geographic variation and systematics of monospermous *Juniperus* from the Chihuahuan desert based on RAPDs and terpenes. Biochem. Syst. Ecol. 22:699-710.
125. Adams, R. P., Chu Ge-lin and Zhang Shao-Zhen. 1995. Comparisons of the volatile leaf oils of *Juniperus rigida* Mig. from northwestern China, Korea and Japan. J. Ess. Oil Res. 7:49-52.
126. Adams, R. P. 1995. Revisionary study of Caribbean species of *Juniperus* (Cupressaceae) Phytologia 78: 134-150.
127. Anderson, A., H. Deslaurieres, G. Collin and **R. P. Adams**. 1995. Essential oil of the wood of *Thuja occidentalis* L. JEOR 7:489-495.
128. Adams, R. P., Zhang Shao-Zhen, and Chu Ge-lin. 1995. The leaf essential oil of *Juniperus formosana* Hayata from China. J. Ess. Oil Res. 7:687-689.
129. Adams, R. P. 1996. Conservation of DNA: DNA Banking. in Biotechnology and Plant Genetic Resources: Conservation and Use. B. V. Ford-Lloyd, H. J. Newbury and J. A. Callow, eds., CAB International, Oxon, UK.
130. Adams, R. P., Zhang Shao-Zhen, and Chu Ge-lin. 1996. The leaf essential oil

- of *Juniperus squamata* D. Don var. *fargesii* Redh & Wils. from China. J. Ess. Oil Res. 8:53-56.
131. Pandey, R. N., **R. P. Adams**, and L. E. Flournoy. 1996. Inhibition of Random Amplified Polymorphic DNAs (RAPDs) by plant polysaccharides and effects of buffer enhancers. Plant Molecular Biology Reporter 14: 17-22.
132. Flournoy, Lori E., **R. P. Adams**, and R. N. Pandey. 1996. Interim and archival preservation of plant specimens in alcohols for DNA studies. BioTechniques 20: 657-660.
133. Adams, R. P., A. F. Barrero and A. Lara. 1996. Comparisons of the leaf essential oils of *Juniperus phoenicea* L., *J. phoenicea* subsp. *eu-mediterranea* Lebr. & Thiv. and *J. phoenicea* var. *turbinata* (Guss.) Parl. J. Essent. Oil Res. 8:367-371.
134. Shatar, S. and **R. P. Adams**. 1996. Analyses of the leaf and resin essential oils of *Pinus sibirica* (Rupr.) Mayr from Mongolia. J. Ess. Oil Res. 8:549-552.
135. Adams, R. P. and R. P. Chaudhary. 1996. The leaf essential oil of *Juniperus indica* Bertol. from Nepal. JEOR 8: 677-680.
136. Adams, R. P. 1997. Passive infiltration of insecticides into plant materials/ essential oils during transit. JEOR 9: 3-4.
137. Adams, R. P., T. A. Zanoni, A. L. Cambil, A. F. Barrero and L. G. Cool. 1997. Comparisons among *Cupressus arizonica* Greens, *C. benthamii* Endl., *C. lindleyi* Klotz. ex Endl. and *C. lusitanica* Mill. using leaf essential oils and DNA fingerprinting. JEOR 9:303-310.
138. Adams, R. P. 1997. Comparisons of the volatile leaf oils of *Juniperus drupacea* Labill. from Greece, Turkey and the Crimea. JEOR 9:541-544.
139. Adams, R. P. 1997. The leaf essential oil of *Juniperus gracilior* Pilger var. *urbaniana* (Pilger & Ekman) R. P. Adams: Comparison with other Caribbean *Juniperus* species. JEOR 9: 641-647.
140. Adams, R. P. 1998. The leaf essential oil of *Juniperus recurva* Buch.-Ham. ex D. don from India and Nepal compared with *J. recurva* var. *squamata* (D. Don) Parl. JEOR 10: 21-24
141. Adams, R. P. and Y. Turuspekov. 1998. Taxonomic reassessment of some Central Asian and Himalayan scale-leaved taxa of *Juniperus* (Cupressaceae) supported by random amplification of polymorphic DNA. Taxon 47:75-84.
142. Adams, R. P., T. A. Zanoni, Teris A. van Beek, M. A. Posthumous and Cees van de Haar. 1998. Essential leaf oil of *Amyris diatrypa* Sprengel from the Dominican Republic. J. Ess. Oil Res. 10: 175-178.
143. Adams, R. P. and M. R. Dafforn. 1998. DNA fingerprints (RAPDs) of the pantropical grass vetiver, *Vetiveria zizanioides* (L.) Nash (Gramineae), reveal a single clone 'Sunshine' is widely utilized for erosion control. <http://www.vetiver.org/resdna.htm>, The Vetiver Network, Leesburg, Virginia.
144. Adams, R. P., and M. R. Dafforn. 1998. Lessons in diversity: DNA sampling of the pantropical grass *Vetiveria zizanioides* uncovers genetic uniformity in erosion-control program. Diversity 13: 27-28

145. Adams, R. P., Lori E. Flournoy, Ram Lakhan Singh, Hiram Johnson and Herman Mayeux. 1998. Invasion of grasslands by *Juniperus ashei*: A new theory based on random amplified polymorphic DNAs (RAPDs). *Biochemical Systematics and Ecology* 26: 371-377.
146. Adams, R. R. 1998. The leaf essential oils and chemotaxonomy of *Juniperus* sect. *Juniperus*. *Biochemical Systematics and Ecology* 26:637-645.
147. Adams, R. P. and L. H. Rieseberg. 1998. The effects of non-homology in RAPD bands on similarity and multivariate statistical ordination in *Brassica* and *Helianthus*. *Theoret. App. Gen.* 97:323-326.
148. Adams, R. P. L. E. Flournoy and R. N. Pandey. 1998. Obtaining reproducible patterns from random polymorphic DNA amplification (RAPDs). *in* Conservation of Plant Genes III: Conservation and Utilization of African Plants. R. P. and J. E. Adams, eds., Missouri Botanical Garden, St. Louis.
149. Adams, R. P., Ming Zhong, Y. Turuspekov, M. R. Dafforn and J. F. Veldkamp. 1998. DNA fingerprinting reveals clonal nature of Vetiver (*Vetiveria zizanioides* L. (Nash) and sources of potential new germplasm. *Molecular Ecology* 7: 813-818.
150. Adams, R. P., A. D. Dembitsky and S. Shatar. 1998. The leaf essential oils and taxonomy of *Juniperus centrasiatica* Kom., *J. jarkendensis* Kom., *J. pseudosabina* Fisch., May. & Ave-Lall., *J. sabina* L. and *J. turkestanica* Kom. *JEOR* 10: 489-496.
151. ter Welle, B. J. H. and **R. P. Adams**. 1998. Investigation of the wood anatomy of *Juniperus* (*Cupressaceae*) for taxonomic utilization. *Phytologia* 84: 354-362..
152. Shatar, S. and **R. P. Adams**. 1998. The essential oil of *Asterothamnus centrali-asiaticus* Novopokr. from Mongolia. *JEOR* 10: 654-656.
153. Adams, R. P., J. Altarejos, C. Fernandez, and A. Camacho. 1999 The leaf essential oils and taxonomy of *Juniperus oxycedrus* L. subsp. *oxycedrus*, subsp. *badia* (H. Gay) Bedeaus, and subsp. *macrocarpa* (Sibth. & Sm.) Ball. *JEOR* 11, 167-172.
154. Adams, R. P. 1999. Systematics of multi-seeded eastern hemisphere *Juniperus* based on leaf essential oils and RAPD DNA fingerprinting. *BSE* 27: 709-725.
155. Adams, R. P., M. Zhong and Y. Fei. 1999. Preservation of DNA in Plant Specimens: Inactivation and re-activation of DNases in field specimens. *Molec. Ecol.* 8: 681-683.
156. Le Duc, A., R. P. Adams and Ming Zhong. 1999. Using random amplification of polymorphic DNA for a taxonomic reevaluation of Pfitzer junipers. *HortScience* 34(6): 1123-1125.
157. Adams, R. P. and M. R. Dafforn. 1999. DNA fingerprints of the pantropical grass vetiver, *Vetiveria zizanioides*. *Au Journal of Technology* 2:173-180
158. Adams, R. P., M. Zhong, P. Srifah and N. Sangduen. 1999. DNA genetic diversity of *Vetiveria zizanioides* (Poaceae). *Phytologia* 85: 85-95.
159. Adams, R. P. 2000a. Systematics of smooth leaf margin *Juniperus* of the western hemisphere based on leaf essential oils and RAPD DNA fingerprinting. *BSE* 28: 149-

- 162.
160. Adams, R. P. 2000b. Systematics of *Juniperus* section *Juniperus* based on leaf essential oils and RAPD DNA fingerprinting. *Biochem. Syst. Ecol.* 28: 515-528.
161. Adams, R. P. 2000c. Systematics of the one seeded *Juniperus* of the eastern hemisphere based on leaf essential oils and random amplified polymorphic DNAs (RAPDs). *Biochem. Syst. Ecol.* 28: 529-543
162. Adams, R. P. 2000d. The serrate leaf margined *Juniperus* (Section *Sabina*) of the western hemisphere: Systematics and evolution based on leaf essential oils and Random Amplified Polymorphic DNAs (RAPDs). *Biochem. Syst. Ecol.* 28: 975-989.
163. Adams, R. P. 2001. Geographic variation in leaf essential oils and RAPDs of *J. polycarpos* K. Koch in central Asia. *Biochem. Syst. Ecol.* 29: 609-619..
164. Adams, R. P., R. N. Pandey, Serge Rezzi and Joseph Casanova. 2002. Geographic variation in the Random Amplified Polymorphic DNAs (RAPDs) of *Juniperus phoenicea*, *J. p. var. canariensis*, *J. p. subsp. eu-mediterranea*, and *J. p. var. turbinata*. *Biochem. Syst. Ecol.* 30: 223-229.
165. Adams, R. P., C. Hsieh, J. Murata, R. N. Pandey. 2002. Systematics of *Juniperus* from eastern Asia based on Random Amplified Polymorphic DNAs (RAPDs). *Biochem. Syst. Ecol.* 30: 231-241.
166. Turuspekov, Y., R. P. Adams and C. M. Kearney. 2002. Genetic diversity of three perennial grasses from the Semipalatinsk nuclear testing region of Kazakstan after long-term nuclear testing radiation exposure. *BSE* 30: 809-817.
167. Rushforth, K., **R. P. Adams**, Ming Zhong, Xiao-qiang Ma and Ram Naresh Pandey. 2003. Variation among *Cupressus* species from the eastern hemisphere based on Random Amplified Polymorphic DNAs (RAPDs). *BSE* 31:17-24.
168. Adams, R. P., Ram N. Pandey, Jerry W. Leverenz, Norman Dignard, Kenneth Hoegh and Thor Thorfinnsson. 2003. Pan-Arctic variation in *Juniperus communis*: Historical Biogeography based on DNA fingerprinting. *BSE* 31:181-192.
169. Adams, R. P., A. Schwarzbach and R. N. Pandey. 2003. The Concordance of Terpenoid, ISSR and RAPD markers, and ITS sequence data sets among genotypes: An example from *Juniperus*. *BSE* 31: 375-387.
170. Cool, L. G. and R. P. Adams. 2003. A pregeijerene isomer from *Juniperus erectopatens* foliage. *Phytochem.* 63:105-108.
171. Bartel, J. A., R. P. Adams, S. A. James, L. E. Mumba and R. N. Pandey. 2003. "Variation among *Cupressus* species from the western hemisphere based on Random Amplified Polymorphic DNAs (RAPDs)" *BSE* 31:693-702..
172. Adams, R. P., L. E. Mumba, S. A. James, R. N. Pandey, T. Gauquelin and W. Badri. 2003. Geographic variation in the leaf essential oils and DNA fingerprints (RAPDs) of *Juniperus thurifera* L. from Morocco and Europe. *J. Ess. Oil Res.* 15:148-154..
173. Adams, R. P., and R. N. Pandey. 2003. Analysis of *Juniperus communis* and its varieties based on DNA fingerprinting. *BSE* 31: 1271 - 1278.
174. Betty C-R. Zhu, Gregg Henderson, Robert P. Adams, Li-Xin Mao, Ying Yu and Roger A. Laine. 2003. Repellency of vetiver oils from different biogenetic and geographic origins against Formosan subterranean termites (Isoptera: Phinotermitidae). *Sociobiology* 42: 623-638.

175. Adams, R. P., R. N. Pandey, M. R. Dafforn and S. A. James. 2003. Vetiver DNA fingerprinted cultivars: Effects of environment on growth, oil yields and composition. *J. Essent. Oils* 15: 363-371.
176. Adams, R. P. 2004. The co-occurrence and systematic significance of pregeijerene B and 8- α -acetoxylemol in *Juniperus*. *BSE* 32: 559-563.
177. Adams, R. P. 2004. *Juniperus deltoides*, a new species and nomenclatural notes on *Juniperus polycarpus* and *J. turcomanica* (Cupressaceae). *Phytologia* 86: 49 - 53.
178. Adams, R. P., M. Habte, S. Park and M. R. Dafforn. 2004. Preliminary comparison of vetiver root essential oils from cleansed (bacteria- and fungus-free) versus non-cleansed (normal) vetiver plants. *BSE* 32: 1137-1144.
179. Little, D. P., A. E. Schwarzbach, R. P. Adams and C-F. Hsieh. 2004. The circumscription and phylogenetic relationships of *Callitropsis* and the newly described genus *Xanthocyparis* (Cupressaceae). *Am. J. Bot.* 91: 1872-1881.
180. James, S. A., S. Cordell, R. P. Adams, and C. F. Puttock. 2004. Genetic and morphological variation within *Metrosideros polymorpha* (Myrtaceae) populations from different habitats in Hawaii. *New Zealand J. Bot.* 42: 263 - 270.
181. Adams, R. P. and S. Nguyen. 2005. Infra-specific variation in *Juniperus deppeana* and f. *sperryi* in the Davis Mountains, Texas: Variation in leaf essential oils and Random Amplified Polymorphic DNAs (RAPDs). *Phytologia* 87(2):96-108.
182. Adams, R. P., J. A. Morris, R. N. Pandey and A. E. Schwarzbach. 2005. Cryptic speciation between *Juniperus deltoides* and *J. oxycedrus* (Cupressaceae) in the Mediterranean. *Biochem. Syst. Ecol.* 33: 771-787.
183. Adams, R. P., M. Socorro G. Elizondo, and M. G. Elizondo and E. Slinkman. 2006. A new subalpine variety of *Juniperus blancoi* Martinez (Cupressaceae) from Durango, Mexico. *Biochem. Syst. Ecol.* 34: 205-211.
184. Adams, R. P., K. Rushforth and S. N. Trimble. 2006. The origins of Leyland's cypresses (x Cupressocyparis *leylandii*) based on DNA data. *Phytologia* 88:1-16..
- In Press:
185. Adams, R. P. and A. E. Schwarzbach. 2006. A new variety of *Juniperus sabina* from Mongolia: *J. sabina* var. *mongolensis*. *Phytologia* (in press).
186. Adams, R. P., S. Nguyen and J. Liu. 2006. Geographic variation in the leaf essential oils of *Juniperus sabina* and var. *arenaria*. *J. Ess. Oil Res.* (in press).
187. Shatar, S., R. P. Adams and W. A. Koenig. 2006. Comparative study of the essential oil of *Rhodiola rosea* L. from Mongolia. *J. Ess. Oil Res.* (submitted).
188. Adams, R. P., P. Thomas and K. Rushforth. The leaf essential oils of the new conifer genus, *Xanthocyparis*: *Xanthocyparis vietnamensis* and *X. nootkatensis*. *J. Ess. Oil Res.* (in press).
189. Adams, R. P. and S. Nguyen. The leaf essential oils of the genus *Calocedrus*. *J. Ess. Oil Res.* (in press).
190. Adams, R. P. 2006. Intraspecific adjustments in *Juniperus deppeana* (Cupressaceae) *Phytologia* (in press)
191. Adams, R. P., A. E. Schwarzbach and S. Nguyen. 2006 Reassessment of the taxonomy of *Juniperus flaccida* based on DNA data and morphology. *Phytologia* (in prep.).

192. Achak, Nadia, A. Romane, M. Alifriqui and R. P. Adams. 2007. Effect of leaf drying and geographic sources on the essential oil composition of *Juniperus thruifera* L. var. *africana* Maire from the Tensift - Al Haouz, Marrakech region. J. Ess. Oil Res. (submitted).
193. Adams, R. P., Phillip S. Beauchamp, Vasu Dev and Stephen M. Dutz. 2007. New Natural Products isolated from one-seeded *Juniperus* of the Southwestern United States: Isolation and occurrence of 2-ethenyl-3-methyl phenol and its derivatives. J. Ess. Oil Res. (submitted).
194. Adams, R. P., Sanko Nguyen, Dennis A. Johnston, Sunghun Park, Tony L. Provin and Mitiku Habte. 2007. Comparison of vetiver root essential oils from cleansed (bacteria- and fungus-free) versus non-cleansed (normal) vetiver plants. Biochem. Syst. Ecol. (submitted)
195. Adams, R. P. A. E. Schwarzbach, S. Nguyen, J. A. Morris and J-Q. Liu. 2007. Geographic variation in *Juniperus sabina* L., *J. sabina* var. *arenaria* (E. H. Wilson) Farjon, *J. sabina* var. *davurica* (Pall.) Farjon and *J. sabina* var. *mongolensis* R. P. Adams. Plant Syst. Evol. (submitted).
196. Adams, R. P. A. E. Schwarzbach, S. Nguyen, J. A. Morris and J-Q. Liu. 2007. Geographic variation in *Juniperus deppeana* based on DNA sequence, DNA fingerprinting and morphology. Ann. Mo. Bot. Gard (submitted).
197. Adams, R. P. 2007? Can RAPD DNA fingerprinting data be useful in systematics? A point of view. Biochem. Syst. Ecol. (submitted)
198. Adams, R. P. 2006. *Cupressaceae* in: San Juan Basin Flora Project., (submitted)
199. Adams, R. P. 2007. *Juniperus* in: The Jepson Manual, 2nd ed., U. Calif., Berkeley Press.(submitted)
200. Welker, Barbara J., W. Koenig, M. Pietsch and R. P. Adams. 2006. Feeding selectivity by mantled howler monkey (*Alouatta palliata*) in relation to leaf secondary chemistry in the tree species *Hymenaea courbaril*. J. Chem. Ecol. (in prep.).
201. Schwarzbach, A. E., R. P. Adams and J. A. Morris. 2007. Phylogeny of *Juniperus* based on nrDNA and trnC-trnD sequences. Plant Syst. Evol. (in prep.)
202. Moncayo-Estrada, R., R. P. Adams, O. T. Lind and C. Escalera-Gallardo. Genetics similarity among six species of silversides fish (*Chirostoma*: Atherinopsidae) detected by DNA fingerprinting. (in prep.).

Books Published:

1. Adams, R. P. 1969. Chemosystematic and numerical studies in natural populations of *Juniperus*. Ph.D. Thesis, U. of Texas at Austin.
2. Adams, R. P. 1974. Rapid access information retrieval system user's manual. For the Rapid Access Plant Information Center (RAPIC) of Colorado. 61 pp. CSU Experiment Station, Ft. Collins, CO.
3. Adams, R. P. 1989. Identification of Essential Oils by Ion Trap Mass Spectroscopy. 302 pages. Academic Press, N.Y.
4. Adams, R. P. and J. E. Adams. 1992. Conservation of Plant Genes: DNA Banking and *in vitro* biotechnology. Academic Press, Inc., New York.
5. Adams, R. P., J. S. Miller, E. M. Golenberg and J. E. Adams. 1994. Conservation of Plant Genes II: Utilization of Ancient and modern DNA, Missouri Botanical Garden Press, St. Louis .
6. Adams, R. P. 1995. Identification of essential oil components by gas chromatography/ mass spectroscopy. Allured Publ., Carol Stream, IL
7. Adams, R. P. and J. E. Adams. 1998. Conservation of Plant Genes III: Conservation and utilization of African plants. Missouri Botanical Garden Press, St. Louis.
8. Adams, R. P. 2001. Identification of essential oil components by gas chromatography/ quadrupole mass spectroscopy. Allured Publ., Carol Stream, IL
9. Adams, R. P. 2002. Activities, Crafts and Ideas for Boys Clubs, Vol. 1. Trafford Publ., Vancouver, B.C.
10. Adams, R. P. 2004. Junipers of the World: The genus *Juniperus*. Trafford Publ., Vancouver, B. C.
11. Adams, R. P. 2006. Identification of essential oil components by gas chromatography/ mass spectrometry, 4th edition. Allured Publ., Carol Stream IL.

Symposium Papers (Invited):

Adams, R. P. and B. L. Turner. 1969. Chemical investigations of populational problems in *Juniperus*. In the Symposium: Chemical approaches to systematics. Organized by Dr. T.J. Mabry. XI International Botanical Congress. Seattle, Washington.

Irving, R. and **R. P. Adams**. 1971. Genetics and biosynthetic relationships of monoterpenes. Presented at the Phytochemical Society of North America Symposium on: Terpenoids: Structure, Biogenesis, and Distribution. Monterey, Mexico.

Adams, R. P. 1972. Terpenes and the taxonomist. In the Am. Soc. Plant Tax. symposium: Biochemistry and the taxonomist AIBS meetings, Minneapolis, Minn. Abst. in *Brittonia* 24:117.

Adams, R. P. 1973. Computer graphic plotting and mapping of data in systematics. In the Symposium: Computer revolution in systematics. Organized by Dr. J. F. Mello. International Congress on Systematic and Evolutionary Biology (ICSEB), Boulder, Colorado.

Adams, R. P. 1974. Populational differentiation in two species of *Juniperus*. In the Symposium on: Wide Ranging Species--Variation and Adaptation. Organized by Canadian Bot. Soc. and Am. Bot. Soc., AIBS meetings, Tempe, Arizona.

Adams, R. P. 1975. Computer graphics in systematics. In the Symposium: Computers in Systematics and Floristics. Organized by Dr. F.H. Perring. XII International Botanical Congress. Leningrad, Russia.

Adams, R. P. 1975. Terpenoids: Application to specific problems in *Juniperus*. In the Symposium: Micro-Molecular Approaches to Generic and Infrageneric Problems. Organized by Dr. B.L. Turner. XII International Botanical Congress, Leningrad, Russia.

Adams, R. P. 1976. Chemosystematics-Analysis of populational differentiation and variability of ancestral and modern *Juniperus ashei*. In the Symposium: Chemosystematics. 23rd annual systematics symposium at the Missouri Botanical Garden, St. Louis, Mo.

Adams, R. P. and M. Alder. 1981. The opportunities of energy production from milkweed. Natl. Petroculture Soc. Energy Fair. June 10-14. Anaheim, California.

Adams, R. P. 1982. Production of liquid fuels and chemical feedstocks from milkweeds. In the symposium: Energy from Biomass and Wastes, Inst. Gas Tech. Jan. 25-29. Lake Buena Vista, Florida.

Adams, R. P. 1982. Chemicals from arid- /semi-arid land plants: whole plant utilization of milkweeds. Office of Tech. Assess., Congress. Dec. 1-2, Washington, D.C.

Adams, R. P. 1983. Selection criteria for arid and semi-arid land phytochemical crops. In the symposium: U.S.-Mexico Symposium: Renewable Phytochemical Resources of the Desert. Jan. 15-16. Univ. of Calif., Irvine. Organized by Dr. Eloy Rodriguez.

Adams, R. P. 1983. Application of biotechnological methods for *in vitro* biosynthesis of bioactive saponins and propagation of Endod. In the symposium: International Workshop on *Phytolacca dodecandra* (Endod): Schistosomiasis and the potential of Endod molluscicides. Lusaka, Zambia. March 7-11.

Adams, R. P. 1983. Bio-Renewable Sources of Chemicals from the Chihuahuan Desert. The Chihuahuan Desert Symposium. Oct. 20-21, 1983. Alpine, Texas.

Adams, R. P. 1984. Economic Phytochemical Products. Introductory lecture, Economic Phytochemical Products Symposium. AIBS Meetings. Ft. Collins, CO, Aug. 6-10, 1984, R. P. Adams, Organizer and Chairman.

Symposium Papers (continued):

- Adams, R. P. and R. M. Parkhurst. 1986. Project analysis of geographic variation in *Phytolacca dodecandra* in Africa using morphology and non-polar leaf chemical components. In the symposium: Second International Workshop on Endod, *Phytolacca dodecandra*. Mbabane, Swaziland, April 7-11.
- Adams, R. P. 1987. Biogeography and evolution of the junipers of the West Indies. In the symposium: Biogeography of the West Indies. Florida State Museum, March 2-5, 1987. Gainesville, FL.
- Adams, R. P. 1988. The preservation of Chihuahuan plant genomes through *in vitro* Biotechnology: DNA Bank-Net, a genetic insurance policy. The Third Chihuahuan Desert Symposium. Oct. 20-21, 1988. Alpine, Texas. Dennie Miller, organizer.
- Adams, R. P. 1989. Genome conservation by *In Vitro* Biotechnology: DNA Bank-Net. International Conference on Plant Biotechnology, Jan. 1989. Nairobi, Kenya.
- Adams, R. P. 1990. Geographical variation in Endod (*Phytolacca dodecandra* in Africa. in: Workshop on recent developments and future directions in Endod research. Oct. 16-19, 1990, Addis Ababa, Ethiopia.
- Adams, R. P., Nhan Do and Chu Ge-Lin. 1991. Preservation of DNA in plant specimens from endangered tropical species by desiccation. in: DNA Bank-Net Meeting. Royal Botanical Garden, Kew, London, April 16-18, 1991.
- Adams, R. P. 1991. The conservation and utilization of genes from endangered and extinct plants: DNA Bank-Net. in: Gene conservation and Exploitation. Stadler Symposium. Columbia MO Oct. 1991. J. P. Gustafson, R. Appels and P. Raven, organizers.
- Adams, R. P. 1993. DNA conservation and the DNA Bank-Network. in: Conservation and utilization of genetic resources. Symposium. Juan March Institution, Madrid, Spain, Feb. 22-24, 1993.
- Adams, R. P. 1993. DNA Data -Banking and its role in documenting phytodiversity. in: "Sampling the Green World", Botanical Research Inst. of Texas, Ft. Worth, TX Nov. 18-20, 1993, .
- Adams, R. P. 1996. The role of DNA banking in the preservation of tropical plant resources. Keynote Address, International Symposium and workshop on Conservation Biology: Molecular, biotechnological and conventional approaches. Nov. 22-23, 1996, Sarawak, Malaysia. Dr. Azib Salleh, convener.
- Adams, R. P. 1997. DNA Bank-Net: a perspective. in: DNA Bank-Net Meeting III. Nairobi, Kenya. July 2--23, 1997.
- Adams, R. P., R. N. Pandey, T. Gauquelin and W. Badri. 2001. Systematics of *Juniperus thurifera* using DNA fingerprinting and leaf essential oils: Comparision of the Moroccan *J. thurifera* with populations from Spain and France. Proceedings: Le Genevrier thurifere (*Juniperus thurifera* L.) et les forets d'altitude dan les montagnes du pourtour mediterraneen. Le Deuxieme Colloque International. Marrakech, Morocco, April 17-21, 2001.
- Adams, R. P. 2003.. Vetiver DNA fingerprinted cultivars: Effects of environment on growth, oil yields and composition. International Society of Essential Oils Wuerzberg, Germany, Sept. 26-30.