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#### 2005 Publication List

#### **Books**

**Arnold, R.N.,** Integrated pest management for potatoes in the western United States. 1986. Contributed the Chapter on Weeds. University of California, Division of Agriculture and Natural Resources Publication 3316.

### **Refereed Journal Articles**

- **Arnold, Richard N.**, Dan Smeal and Michael K. O'Neill. 2005. Broadleaf weed control in field corn with postemergence herbicides. J. of Crop Management doi:10.1094/CM-2005-0224-01-RS.
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- **Arnold, R.N.**, E.J. Gregory, and D. Smeal. 1988. The Russian Wheat Aphid. New Mexico Journal of Science, Vol. 28 p.140.
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- **Arnold, R.N.** 2004. Produced water treatment program: A cooperative effort. 49<sup>th</sup> Annual Water Desalination and Reuse Strategies for New Mexico. Pp47-55
- **Arnold, R.N.**, Michael K. O'Neill and Dan Smeal. 2004. Broadleaf weed control in field corn with postemergence herbicides. Proc. Western Society of Weed Science, Vol. 57:61. ISSN:0091-4487.
- **Arnold, R.N.**, Michael K. O'Neill, and Dan Smeal. 2003. Broadleaf weed control in spring-seeded alfalfa. Proc. Western Society of Weed Science, Vol. 56:47. ISSN:0091-4487.
- Dan Smeal, T.W. Sammis, M.K. O'Neill and **R.N. Arnold**. 2003. Climate-based irrigation scheduling for warm season and cool season turfgrasses. Proc. 24<sup>th</sup> Annual International Irrigation Show and Conference. Submitted but not published.
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# **Progress Reports**

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- **Arnold, Richard N.**, Michael K. O'Neill and Dan Smeal. 2004. Broadleaf weed control in spring-seeded alfalfa. Western Society of Weed Science Research Progress Report. p.67. ISSN:0090-8142.
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### **Unnumbered Reports**

Hathorn, Gary, Mick O'Neill, **R.N. Arnold**, Daniel Smeal, Curtis Owen, and Jan Tomko. 2001. Alfalfa production in the four corners.

#### **Popular or Trade Publications**

- **Arnold, R.N.** 2004. Produced water part of science center research. Farmington Daily Times, April 4, Section A3.
- **Arnold, R.N.** 2004. Ancient water may be used for irrigation. Farmington Daily Times, April 13, Section A2.
- **Arnold, R.N.** and Bureau of Land Management, Farmington Field Office. 2002. Video titled "Experimental seeding plots on federal lands in northwest New Mexico."
- **Arnold, R.N.** 2002. Drought-resistant grass sought for San Juan Basin. New Mexico Business Weekly, Vol. 8 #15p6.
- **Arnold, R.N.** 2002. Agencies team together for well-site reclamation. The Farmington Daily Times, July 9, pA-1 & A-5.
- **Arnold, R.N.** 2002. Agricultural Science Center tests grass. The Farmington Daily Times, June 20, pA-3.
- **Arnold, R.N.** 2001. NMSU helps re-seed disturbed San Juan Basin Lands, New Mexico State University Agricultural Communications, p002.
- **Arnold, R.N.** 2000. Getting the edge on weeds. New Mexico Resources, Issue 26, p27.
- **Arnold, R.N.** 1999. Russian olives more weed than tree, stump treatment kills them. The Weed Times Issue #2, p11.

- **Arnold, R.N.** 1997. Nightshade research gives pinto beans a fighting chance. Crop Protections Manager, Southern Ed., p33.
- **Arnold, R.N.** 1987. Navajo farm increasing harvest planning expansion and innovation. The Albuquerque Journal, march 8, Section C p1.
- During the past 25 years and from time to time during the year I have been on KOBF TV, and been interviewed by the local radio station KENN 1390 concerning research and field days.

# Papers and/or Talks Presented Before Professional Societies.

- **Arnold, R.N.** 2005. Certified Crop Advisor quarterly meeting. Ruidoso, New Mexico, January 25. (**board member**).
- **Arnold, R.N.**, 2005. 45<sup>th</sup> Meeting of Weed Science Society of America, Honolulu, Hawaii, February 7-10, (participant)
- **Arnold, R.N.** 2005. 58<sup>th</sup> Annual meeting of the Western society of Weed Science. 2005. Broadleaf weed control in dry beans with preemergence followed by sequential postemergence herbicides, Vancouver, British Columbia, March 8-10, (**invited speaker**).
- **Arnold, R.N.** 2005. 20<sup>th</sup> International Grassland Congress, Dublin, Ireland, June 26 to July 1. (participant).
- **Arnold, R.N.** 2005. Certified Crop Advisor quarterly meeting, Clovis, New Mexico, August 2. (**board member**).
- **Arnold, R.N.** 2004. Certified Crop Advisor quarterly meeting. Las Cruces, New Mexico, February 17. (**board member**).
- **Arnold, R.N.** 2004. Ornamental and turf seminar. 2004. Principles of weed control and aquatic weed control, Farmington, New Mexico, March 3 and 4. (**invited speaker**).
- **Arnold, R.N.** 2004. 57<sup>th</sup> Annual meeting of the Western Society of Weed Science. 2004. Broadleaf weed control in field corn with postemergence herbicides, Colorado Springs, Colorado, March 9-11. (**invited speaker**).
- **Arnold, R.N.** 2004. Irrigated pasture and alfalfa management workshop. . Weed control in alfalfa. Cortez, Colorado, March 18. (**invited speaker**).
- **Arnold, R.N.** 2004. 49<sup>th</sup> Annual New Mexico water conference. Produced water treatments program: a cooperative effort. Ruidoso, New Mexico, September 21-22. (**invited speaker**).

- Hightower, Mike, Allan Sattler, Mark Phillips, Brian Brister, **Rick Arnold**, Martha Cather, and Brian McPherson. 2004. Managing coal bed methane-produced water for beneficial use. 49<sup>th</sup> Annual New Mexico Water Conference. Ruidoso, New Mexico. September 21-22. (**poster**).
- **Arnold, R.N.** Produced water treatment program: a cooperative effort. 2004. 49<sup>th</sup> Annual New Mexico Water Conference, Ruidoso, NM, Proceeding Report 336, pp47-53. (**invited speaker**).
- **Arnold, R.N.** 2003. 51<sup>st</sup> Annual meeting of the Rocky Mountain Plant Food and Agricultural Chemicals Association, January 14-16, Denver, CO. (participant).
- **Arnold, R.N.** 2003. Certified Crop Advisor Program of New Mexico. Certified Crop Advisor Committee, January 22, Albuquerque, NM. (**board member**).
- **Arnold, R.N.** 2003. New Mexico Crop Production Association. January 27 and 28, Ruidoso, NM. (**Ex-Officio Board Member**).
- **Arnold, R.N.** 2003. Weed identification. 11<sup>th</sup> Annual Four Corners Weed Management Symposium, March 6, Durango, CO. (**invited speaker**).
- Smith, Kenny W., **R.N. Arnold** and Dan Smeal. 2003. Russian knapweed control on southern Colorado rangeland.56<sup>th</sup> Annual meeting of the Western Society of Weed Science, March 11-13, Kauai, HI. (participant).
- Smeal, Dan., **R.N. Arnold** and Michael K. O'Neill. 2003. Broadleaf weed control in field corn with postemergence herbicides. 56<sup>th</sup> Annual meeting of the Western Society of Weed Science, March 11-13, Kauai, HI. (**speaker** for Dan).
- **Arnold, R.N.**, Michael K. O'Neill and Dan Smeal. 2003. Broadleaf weed control in spring-seeded alfalfa. 56<sup>th</sup> Annual meeting of the Western Society of Weed Science, March 11-13, Kauai, HI. (**speaker**).
- **Arnold, R.N.** 2003. Certified Crop Advisor Program of New Mexico. Certified Crop Advisor Committee, June 5, Albuquerque, NM. (Committee member and participant).
- **Arnold, R.N.** 2003. Certified Crop Advisor Program of New Mexico. Certified Crop Advisor Committee, November 13, Albuquerque, NM. (Committee member and participant).
- O'Neill, Mick Dan Smeal, and **Rick Arnold.** 2002. Subsurface drip irrigation in northwestern New Mexico. CAHE, All College Conference, January 3-4, Las Cruces, NM.

- **Arnold, R.N.** 2002. Alfalfa and corn production. Annual meeting of the New Mexico Crop Production Association, January 28-29, Ruidoso, NM. (invited speaker).
- Bruce, S.M., M.K. O'Neill, and **R.N. Arnold.** 2002. Plant available nutrients: a comparison of organic and inorganic sources for corn. Great Plains Soil Fertility Conference, March 5-6, Denver, CO.
- Smeal, D, **R.N. Arnold**, J.F. Tomko, and M.K. O'Neill. 2002. Chile pepper (*Capsicum annum* L.) yield response to nitrogen source and rate. Great Plain Soil Fertility Conference, March 5-6, Denver, CO.
- **Arnold, R.N.** M.K. O'Neill, and d. Smeal. 2002. Broadleaf weed control in spring-seeded alfalfa. 55<sup>th</sup> meeting of the Western Society of Weed Science, March 12-14, Salt Lake City, UT. (**poster**).
- **Arnold, R.N.** 2002. Certified Crop Advisor Program of New Mexico. Certified Crop Advisor Committee, May 20, Albuquerque, NM. (participant).
- **Arnold, R.N.** 2002. Weed management in irrigated crops. Third Annual Four Corners Irrigation Workshop, July 11 &12, Cortez, CO. (**invited speaker**).
- Smeal, D., R. Boyles, M.K. O'Neill, and **R.N. Arnold**. 2002. Conserving water in the landscape through turfgrass selection and irrigation scheduling. The New Mexico Water Research Symposium, August 13, Socorro, NM.
- **Arnold, R.N.** 2002. Certified Crop Advisor Program of New Mexico. Certified Crop Advisor Committee, September 24, Albuquerque, NM. (participant).
- **Arnold, R.N.** M.K. O'Neill, and D. Smeal. 2001. Broadleaf weed control with preemergence herbicides. CAHE, All College Conference, January 3-5, Las Cruces, NM. (poster).
- O'Neill, M.K. D. Smeal, **R.N. Arnold**, and T. Lewis. 2001. Potato variety research and production, 1966-2000. CAHE, All College Conference, January 3-5, Las Cruces, NM.
- **Arnold, R.N.** 2001. 49<sup>th</sup> Annual Meeting of the Rocky Mountain Plant Food Association, January 8-11, Denver, CO. (participant).
- Arnold, R.N., J. Schroeder, S. Thomas, R. Lee, B. Lewis, N. Goldberg, and S. Sanderson. 2001. An open forum in which pesticide efficacy results, current information on recently established and threatening pests, and research progress update relevant to regional pest management will be presented. Annual meeting of the New Mexico Crop Production Association, January 29-30, Ruidoso, NM. (invited speaker).

- **Arnold, R.N.** and D. Smeal. 2001. Broadleaf weed control in spring-seeded alfalfa with postemergence applications of AC 299-263 and imazethapyr applied alone or in combination. 54<sup>th</sup> meeting of the Western Society of Weed Science, March 13-15, Coeur d' Alene, ID. (**poster**).
- **Arnold, R.N.**, Rod Cook, Kenny Smith, and Ron Lanier. 2001. Calibration of back pack, field jet, boom buster, saddle pack and pump-up sprayers. Ninth Annual Four Corners Weed Management Symposium, April 10, Farmington, NM. (**invited speaker**).
- Smeal, D., M.K. O'Neill, T.W. Sammis, J. F. Tomko, and **R. N. Arnold.** 2001. Development of crop coefficients for turfgrass irrigation scheduling. 93<sup>rd</sup> meeting of the American Society of Agronomy, October 21-26, Charlotte, NC.
- **Arnold, R.N.**, M.K. O'Neill, and D. Smeal. 2001. Postemergence applications of Raptor and Pursuit for broadleaf weed control in spring-seeded alfalfa. 93<sup>rd</sup> meeting of the American Society of Agronomy, October 21-26, Charlotte, NC. (**poster**).
- O'Neill, M.K., **R.N. Arnold,** and D. Smeal. 2000. Research and future direction at the Agricultural Research Center-Farmington, : meeting the needs of New Mexico in the 21<sup>st</sup> Century. CAHE, All college Conference, January 4-7, Las Cruces, NM.
- **Arnold, R.N.** 2000. Herbicide research results. Annual meeting of the New Mexico Crop Production Association, January 27-28, Ruidoso, NM. (invited speaker).
- **Arnold, R.N.** 2000. Broadleaf weed control in spring-seeded alfalfa with postemergence applications of AC 299-263 and imazethapyr. 53<sup>rd</sup> meeting of the Western Society of Weed Science, March 14-16, Tucson, AZ. (**poster**).
- **Arnold, R.N.** 2000. Herbicides and their families/weed identification. Eighth Annual Four Corners Weed Management Symposium, April 4, Cortez, CO. (invited speaker).
- **Arnold, R.N.** 1999. Annual meeting of the New Mexico Crop Production Association, January 26-27, Ruidoso, NM. (participant).
- **Arnold, R.N.** 1999. Annual grass and broadleaf weed control in dry beans with early preemergence, preemergence and postemergence band applications of dimethenamid, BAS 656 and metolachlor II Mag followed by cultivation and postemergence application of AC 299-263 and imazethapyr in combination with bentazon. 52<sup>nd</sup> meeting of the Western Society of Weed Science, March 9-11, Colorado Springs, CO. (**poster**).

- **Arnold, R.N.** 1999. Seventh Annual Four Corners Weed Management Symposium, April 8, Durango, CO. (participant).
- **Arnold, R.N**. 1999. Seventh Annual New Mexico Vegetation Management Association Meeting and Conference, October 27-29, Albuquerque, NM. (participant).
- **Arnold, R.N.** 1998. Annual meeting of the New Mexico Crop Production Association, January 26-28, Ruidoso, NM. (participant).
- E.J. Gregory, **R.N. Arnold**, and C.K. Owen. 1998. Broadleaf weed control in field corn with postemergence herbicides. 51<sup>st</sup> meeting of the Western Society of Weed Science, March 10-12, Waikoloa, HI.
- Owen, C.K., **R.N. Arnold**, and E.J. Gregory. 1998. Annual grass and broadleaf weed control in dry beans with dimethenamid alone or in combination. 51<sup>st</sup> meeting of the Western Society of Weed Science, March 10-12, Waikoloa, HI.
- Smeal, D, **R.N. Arnold**, E.J. Gregory, and J. Tomko. 1998. Water conservation through turfgrass selection and irrigation scheduling. 19<sup>th</sup> meeting of the Irrigation
  Association, October 20-25, San Diego, CA.
- **Arnold, R.N.** 1997. 36<sup>th</sup> meeting of the New Mexico Agricultural Chemical and Plant Food Association, February 3-5, Mescalero, NM. (participant).
- **Arnold, R.N.**, E.J. Gregory, and D. Smeal. 1997. Annual grass and broadleaf weed control in dry beans with dimethenamid applied postemergence at the first, third, and sixth trifoliolate leaf stage applied before and after cultivation. 50<sup>th</sup> meeting of the Western Society of Weed Science, March 11-13, Portland, OR. (**poster**).
- E.J. Gregory, **R.N. Arnold**, and D. Smeal. 1997. Broadleaf weed control in spring-seeded alfalfa with postemergence applications of AC 299-263 and imazethapyr. 50<sup>th</sup> meeting of the Western Society of Weed Science, March 11-13, Portland, OR. (**invited speaker**).
- **Arnold, R.N.** Control of Russian knapweed and Canada thistle. Fifth Annual Four Corners Weed Management Symposium, March 18, Farmington, NM. (invited speaker).
- **Arnold, R.N.** 1996. 35<sup>th</sup> meeting of the New Mexico Agricultural Chemical and Plant Food Association, January 24-26, Mescalero, NM. (participant).
- **Arnold, R.N.** 1996. Annual meeting of the Independent Agricultural Consultants of Colorado, February 14-15, Fort Collins, CO. (participant).

- **Arnold, R.N.**, E.J. Gregory, and D. Smeal. 1996. Broadleaf weed control in pinto beans with preemergence, preemergence/postemergence and postemergence herbicides. 49<sup>th</sup> meeting of the Western Society of Weed Science, March 11-14, Albuquerque, NM. (**poster**).
- E.J. Gregory, **R.N. Arnold**, and D. Smeal. **1996.** Broadleaf weed control in spring-seeded alfalfa with postemergence applications of AC 299-263 and imazethapyr. 49<sup>th</sup> meeting of the Western Society of Weed Science, March 11-14, Albuquerque, NM. (**poster**).
- Smeal. D. E.J. Gregory, and **R.N. Arnold**. 1996. Sulphur fertilization of wheat and alfalfa with oil refinery by-products. Great Plains Soil Fertility Conference, March 20-23, Denver, CO.
- Smeal, D. E.J. Gregory, and **R.N. Arnold**. 1996. Root yield of buffalo gourd (*Cucurbita foetidissima* HBK) as related to water-use. Fifth International Conference on Desert Development. August 12-17, Texas Tech University, Lubbock TX.
- **Arnold, R.N.** 1995. 34<sup>th</sup> meeting of the New Mexico Agricultural Chemical and Plant Food Association, January 25-27, Mescalero, NM. (participant).
- **Arnold, R.N.** 1995. Independent Agricultural Consultants of Colorado., February 1-2, Northglenn, CO. (participant).
- **Arnold, R.N.** 1995. Weed Control Workshop for Landscape and Maintenance Personnel, February 28, Farmington, NM. (participant).
- **Arnold, R.N.** 1995. Frontier focus dry edible beans. Sandoz Agro, Inc., April 11-12, Denver CO. (invited speaker).
- **Arnold, R.N.**, E.J. Gregory, and D. Smeal. 1995. Broadleaf weed control in pinto beans with imazethapyr and imazethapyr combination. 48<sup>th</sup> meeting of the Western Society of Weed Science, march 13-16, Sacramento, CA. (**poster**).
- E.J. Gregory, **R.N. Arnold**, and D. Smeal. 1995. Broadleaf weed control in spring-seeded alfalfa with postemergence applications of AC 299-263 and imazethapyr. 49<sup>th</sup> meeting of the Western Society of Weed Science, March 13-16, Sacramento, CA.
- Smeal, D., H. Zhang, E.J. Gregory, **R.N. Arnold**, and J. Tomko. 1995.

  Relationship between chlorophyll meter readings and alfalfa tissue N. content. Western Society of Crop Science, June 19-21, Fort Collins, CO.
- Zhang, H., D. Smeal, **R.N. Arnold**, and E.J. Gregory. 1995. Potato nitrogen management by monitoring petiole nitrate levels. Western Nutrient Management Workshop, March 9-10, Salt Lake City, UT.

- **Arnold, R.N.** 1994. Weed control in alfalfa, corn beans, and potatoes. 33<sup>rd</sup> meeting of the New Mexico Agricultural Chemical and Plant Food Association, January 24-26, Mescalero, NM. (**invited speaker**).
- **Arnold, R.N.** 1994. Weed management as related to plant growth. Four Corners Weed Control Symposium, March 3, Farmington, NM. (**invited speaker**).
- **Arnold, R.N.**, E.J. Gregory, and D. Smeal. 1994. Broadleaf weed control in field potatoes. 47<sup>th</sup> meeting of the Western Society of Weed Science, march 14-17, Coeur d' Alene, ID. (**poster**).
- E.J. Gregory, **R.N. Arnold**, and D. Smeal 1994. Weed control in field corn with metribuzin applied postemergence alone or in combination. 47<sup>th</sup> meeting of the Western Society of Weed Science, March 14-17, Coeur d' Alene, ID.
- **Arnold, R.N.** and Steve Dewey. 1994. Sprayer operation and calibration. Noxious Weed Management Short Course, April 25-28, Bozeman, MT. (**invited speaker**).
- Smeal, D., E.J. Gregory, **R.N. Arnold**, and J. Tomko. 1994. Effect of irrigation on the yield components of tomato. American Society of Horticulture Science, August 7-10, Corvallis, OR.
- **Arnold, R.N.** 1993.. 32<sup>nd</sup> meeting of the New Mexico Agricultural Chemical and Plant Food Association, January 25-27, Mescalero, NM. (participant).
- **Arnold, R.N.** 1993. Weed control in alfalfa and other crops. San Juan Basin Weed Control Symposium, February 25, Farmington, NM. (**invited speaker**).
- **Arnold, R.N.**, E.J. Gregory, and M.W. Murray. 1993. Weed control in fall-seeded alfalfa with imazethapyr alone or as a sequential treatment. 46<sup>th</sup> annual meeting of the Western Society of Weed Science, March 9-11, Tucson, AZ. (**speaker**).
- Gregory, E.J., **R.N. Arnold**, and M.W. Murray. 1993. Weed control in corn with dimethenamid. 46<sup>th</sup> meeting of the Western Society of Weed Science, March 9-11, Tucson, AZ.
- **Arnold, R.N.** 1993. Ecology and management of broom snakeweed. Noxious Weed Management Short Course, April 26-29, Bozeman, MT. (**invited speaker**).
- **Arnold, R.N.** 1992. Contributing factors and herbicide injury symptoms of various crops. 31<sup>st</sup> meeting of the New Mexico Agricultural Chemical and Plant Food Association, January 29-31, Ruidoso, NM. (**invited speaker**).

- **Arnold, R.N.**1992. 45<sup>th</sup> meeting of the Western Society of Weed Science, March 9-12, Salt Lake City, UT. (participant).
- **Arnold, R.N.** 1991. Weed control in northwestern New Mexico. 30<sup>th</sup> meeting of the New Mexico Agricultural Chemical and Plant Food Association, January 29-30, Albuquerque, NM. (**invited speaker**).
- Gregory, E.J., **R.N. Arnold**, and M.W. Murray. 1991. Residual effects of imazethapyr and imazethapyr combinations on yield of centennial and Atlantic potatoes. 44<sup>th</sup> meeting of the Western Society of Weed Science, March 12-14, Seattle, WA. (participant).
- Gregory, E.J., **R.N. Arnold**, and D. Smeal. 1991. Pesticide management at the Agricultural Science Center, Farmington, NM. American Society of Agronomy, October 27-November 1, Denver, CO.
- **Arnold, R.N.** 1990. 29<sup>th</sup> meeting of the New Mexico Agricultural Chemical and Plant Food Association, January 8-10, Las Cruces, NM. (participant).
- **Arnold, R.N.**, E.J. Gregory, and M.W. Murray. 1990. Residual effects of DPX-V9360 on field corn, pinto beans, and field potatoes. 43<sup>rd</sup> meeting of the Western Society of Weed Science, March 13-15, Sparks, NV. (**invited speaker**).
- **Arnold, R.N.** 1989.. Alfalfa weed control in northern New Mexico. 28<sup>th</sup> meeting of the New Mexico Agricultural Chemical and Plant Food Association, January 10-11, Roswell, NM. (invited speaker).
- **Arnold, R.N.**, E.J. Gregory, and D. Smeal. 1989. Effects of herbicides on annual broadleaf weeds in pumpkins grown on coarse-textured soils. 42<sup>nd</sup> meeting of the Western Society of Weed Science, March13-16, Honolulu, HI. (invited speaker).
- **Arnold, R.N.** 1989. 65<sup>th</sup> meeting of the Southwestern and Rocky Mountain Division of the American Association for the Advancement of Science, April 5-7, Las Cruces, NM. (participant).
- **Arnold, R.N.**, E.J. Gregory, and D. Smeal. 1989. Chemical weed control in dormant alfalfa in northwestern New Mexico. Sixth Western Alfalfa Improvement Conference, July 12-14, Las Cruces, NM. (invited speaker).
- **Arnold, R.N.**, E.J. Gregory, and D. Smeal. 1989. Weed control in established alfalfa (*Medicago sativa*). New Mexico Academy of Science, September 22-23, Albuquerque, NM. (**invited speaker**).

- **Arnold, R.N.**, E.J. Gregory, and D. Smeal. 1988. Annual grass control in spring planted carrots.41<sup>st</sup> meeting of the Western Society of Weed Science, March 8-10, Fresno, CA. (**invited speaker**).
- **Arnold, R.N.** 1988. New Mexico Academy of Science, September 16-17, Farmington, NM. (participant).
- **Arnold, R.N.** 1987. Weed control in New Mexico crops. 26<sup>th</sup> meeting of the New Mexico Agricultural Chemical and Plant Food Association, January 13-14, Albuquerque, NM. (**invited speaker**).
- **Arnold, R.N.**, E.J. Gregory, and D. Smeal. 1987. Line source herbigation of cinmethylin (SD-95481) for grass control in pinto beans. 40<sup>th</sup> meeting of the Western Society of Weed Science, March 10-12, Boise, ID. (**invited speaker**).
- **Arnold, R.N.** 1987. Broadleaf weed control in carrots. 63<sup>rd</sup> meeting of the Southwestern and Rocky Mountain Division of the American Association for the Advancement of Sciences, March 31-April 4, Austin, TX. (**invited speaker**).
- **Arnold, R.N.** 1986. 25<sup>th</sup> meeting of the New Mexico Agricultural Chemical and Plant Food Association, January 15-16, Las Cruces, NM. (participant).
- **Arnold, R.N.** 1986. 39<sup>th</sup> meeting of the Western Society of Weed Science, March 18-20, San Diego, CA. (participant).
- **Arnold, R.N.** and D. Smeal. 1985. Water-use production functions and consumptive-use curves of alfalfa in northwestern New Mexico. Western Society of Crop Science, June 17-19, Reno, NV. (**invited speaker**).
- **Arnold, R.N.** 1985. American Society of Agronomy, November 25-29, Las Vegas, NV. (participant)
- **Arnold, R.N.** 1985. The use of URAN 32-0-0 as liquid fertilizer. Prince Edward Island Potato Growers Conference, November 16-17, Charlottetown, Canada.(**invited speaker**).
- **Arnold, R.N.** 1985. Evaluations of insecticides for control of corn earworm *Heliothis zea* (Boddie) on sweet corn. Annual meeting of the Entomological Society of America, December 8-12, Hollywood, FL. (**invited speaker**).
- **Arnold, R.N.** 1984. Evaluations of insecticides over a four year period for control of corn earworm *Heliothis zea* (Boddie) on sweet corn. Annual meeting of the Southwestern Entomological Society, March, Oklahoma City, OK. (**invited speaker**).

- **Arnold, R.N.** 1983. 23<sup>rd</sup> New Mexico Agricultural Chemical and Plant Food Association, January 19-21, Roswell, NM. (participant).
- **Arnold, R.N.** 1982. Weed control in established alfalfa. 22<sup>nd</sup> meeting of the Agricultural Chemical and Plant Food Association, January 28-29, Las Cruces, NM. (**invited speaker**).
- **Arnold, R.N.** 1981. 21<sup>st</sup> meeting of the Agricultural Chemical and Plant Food Association, January 15-17, Roswell, NM. (participant).