



Texas Imported Fire Ant Research and Management Project

Progress Report - June 2002

Texas Imported Fire Ant Project for Texas Cooperative Extension Programs

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Funding Amount/2 Years: \$965,254

Summary of Work to be Done: Implement the Texas Imported Fire Ant Research and Management Project through the development and promotion of educational programs for managing red imported fire ants in rural and agricultural areas using current technology and highlight deliverable research addressing the projects' goal. Faculty and staff will also conduct demonstrations to evaluate management approaches including community-wide fire ant management and evaluate of new products and treatment approaches under development. One major focus during this biennium will be to develop 4-H and your curricula and activities to foster responsible ant management concepts.

Major Accomplishments to Date:

- Conducted and numerous mass media efforts, presentations and developed educational products (see Appendix 1).
- Developing KIDZANTS 4-H and youth fire ant curriculum
- Conducted method and result demonstrations including community-wide fire ant management programs, product evaluations and releasing biological control agents
- Texas has become part of a multi-state, multi-agency effort supported by the USDA Area-Wide Project funds to demonstrate integrated fire ant control in improved pastureland (two 300 acre blocks) of aerially-applied bait products (hopper blend, developed in Texas) and around one treatment block, the release of *Thelohania* and phorid flies; collaborations with the Texas Army National Guard continue with the involvement of Dr. Roger Gold and Dr. Harry Howell.

Goals Achieved:

- Helped obtain a 24(c) registration for the "hopper blend" application of s-methoprene plus hydramethylnon baits for use in cattle pastures and non-agricultural lands
- Was involved in the introduction of "Over N' Out" (fipronil) fire ant granular product for

- which this project conducted field evaluations to develop
- Developed scientific (refereed) journal article for the Southwestern Entomology Society about the impact of community-wide fire ant management pilot showcase programs, which is “in press” in the Supplement Issue containing other reports of presentations made at the Symposium highlighting the Texas Fire Ant Project in 2001
- Re-structured the Texas Cooperative Extension part of the Fire Ant Project by re-defining the areas served by Extension Agent - Pest Management personnel and updating position descriptions. Plans are being made as to how this project will evolve after this biennium.

Relevance to the Texas Imported Fire Ant Research Ant Management Project: Texas Cooperative Extension is the outreach education component of the Texas Imported Fire Ant Research & Management Project. Through faculty and staff supported by project funds and faculty and staff within the agency, including Extension Specialists and County Extension Agents, new technology generated from research and regulatory programs, supported by the project, will be delivered to the citizens of Texas through all available teaching methods. The project’s visibility and accountability relies on these outreach activities.

Products; publications submitted/published; presentations/posters presented at state and national technical conferences: (see appendix 1 or visit <http://fireant.tamu.edu>)

Appendix 1. Summary of activities, September 1, 2001 - May 2002, Texas Cooperative Extension Fire Ant Project Team.

Mass media:

KPRC 950am 'Garden Line', SCION Master Gardener newsletter, Bexar Co. 4-H newsletter, Bexar Co. Beef Cattle newsletter, Greenway Homeowner Association newsletter, Sunday San Antonio Express News, WOAI radio, KMOL TV, KENS TV, Greenway Homeowner Association newsletter, Houston Chronicle, Dallas Morning News Home and Garden Section, WFAA, Ali Bertliner of The Headline Group, Neil Sperry Garden show on WBAP, 'Wired' magazine, TAMUS progress report, Sunday Extension article in the San Antonio Express Newspaper, Fort Worth Star Telegram, KRHD-TV ABC Channel 34, radio script for the Grapevine High School Agriculture department, Gulf Coast Cattleman magazine, CNN radio, Orlando Sentinel Newspaper, CBS News 11.

Presentations, displays:

Texas Department of Agriculture's Plant Quality Inspector Training, Horticultural Inspection Society - Southern Chapter; Texas Sportsman’s Association Annual Fundraiser, LCO Conference at Dallas Center, Hill Country Garden Club, Harris County Master Naturalists Chapter, Houston Home Show, Master Gardeners in Dallas County worked at the Fire Ant booth at the State Fair of Texas, City Urban Conference in Fort Worth, Dallas County Pesticide Recertification Training program, Fire Ant Education Conference for landscape professionals via TTVN based at the Dallas district office with remote stations in San Angelo, Temple, Corpus Christi, Uvalde, Galveston, Beaumont, Texarkana, and Overton Texas The Clariden School of Southlake, National Pest Management Association meeting, CAST Conference, Entomol. Sci. Conf., Texas Beekeeper's Assn. meeting, Fire Ant Education Conference for landscape professionals LCO/PCO conference in San Antonio, CEU Conference in Corpus Christi, Master Naturalist training, Autumn Blooms at the Dallas Arboretum, Palo Alto College, Garza High School Horticulture Class, Dallas Arboretum’s ‘Dallas Blooms Autumn’, Winter

Pest Control Operators' Workshop Fire Ant Certification program, San Antonio A&M Club, Bexar County Master Gardeners, B&G conference in San Antonio, Wharton County and Matagorda County CEU conferences, TDA/Farm Bureau Course # 5207, Southwest Judges and Commissioners' Conference in Kerrville, South Woodlands Hills Community Association, First United Methodist "Fun Seekers" in Euless, Second Annual County-Wide Spring Meeting of the Fayette County Wildlife Management Assn., Annual Meeting of the Texas Pest Management Association, Landscape management CEU program in Portland, Southwestern Branch of ESA, the Southwestern Entomology Society and the Mexican Entomological Society in Guanajuato, Gto., Mexico, 2002 San Antonio Stock Show and Rodeo, two home shows in the Houston Area (at The Houston Home Beautiful Show, held at the Reliant Arena and Texas Lawn and Garden Show held at the George R. Brown Convention Center), re-certification seminar in Tarrant County, Annual Imported Fire Ant Research Conference (Athens, GA), Science Alliance Conference, Oakwell Library evening fun series, Morning Glory Garden Club in San Antonio, Medina Co. homeowners from D'Hanis Hondo Quihi and Devine areas, Southern Region Extension Directors in San Antonio, Water Smart Landscaping Workshop, Mercer Arboretum, Tarrant County Master Gardeners, Ellison's Greenhouses, Texas Parks and Wildlife at the Cat Springs Wildlife Association meeting, Nacogdoches Master Gardeners, inter-tribal council program (in Phoenix, AZ), 2 different Ag Fairs in San Antonio, United Space Alliance Earth Day festivities, EPA's Earth Day, Urban Agricultural Conference in Dallas, Burleson County Beef Cattle Field Day, Matagorda County Forage Field Day, Botanical Gardens in San Antonio, 'Whiz Kids' group at Cambridge Elementary school, San Antonio Water System, Oak Hills Elementary Career Day, Southwest ISD Ag Fair, Seasonal Irrigation Presenters' training, Texas Folklife Festival Extension training, County Living Seminar County

Demonstrations:

Bell County Master Gardener Fire Ant Specialists community-wide treatment, October; field released phorid flies in Waller county; BioStim LLC; Amdro hopper blend and "dilute" Amdro test; Fire Ant Day in the Greenway neighborhood, Houston Parks and Recreation Department, Fire Ant and Weather Report Program (Bear Creek Park in Houston, D-9 in Bryan, DFW airport in Dallas), Camp Swift- Texas Army National Guard, bait blower demonstration at Greenleaf Nursery in El Campo, CedarCide's Ridants products, Bell County Master Gardener Specialists organized and executed a community-wide fire ant treatment day in a neighborhood in Harker Heights, field test at Hallettsville Airport and Eagle Lake on fipronil products, South Woodlands Hills Community (Kingwood), Deerfield Village community (Houston), Fonn Villas Civic Association, and Kelliwood Terrace (Katy) community-wide programs, Hermann Park (Hermann Park Golf course and Marvin Taylor Athletic Trail), Nuvis neem test at Mumford, G.P.S. project with Keist Park High School, the Lago Santa Fe Private Lake Community, (Santa Fe, TX), Chipco test at the ball park in Arlington with Mike Merchant, Phorid releases near Vidor in Orange County (property owned by MG Specialist), Waller County, and Wharton County in cooperation with UT lab, Dow Agrosiences - numbered bait compound, Aventis - Firestar bait trial, DuPont - indoxacarb bait, Australian pyriproxyfen formulations, Excel marketing individual mound test and broadcast+IMT test, South Woodland Hills Community in Kingwood, Soygold Trial, Lakeview Country Estates in Mansfield, baiting for fire ants at both Hermann Park and Hermann Park Golf Course, Braeburn Valley West Community,

Volunteer training and involvement:

Master Gardener Fire Ant Specialist "Ant Academy" training days (March 5 and April 4)

(Dallas, Tarrant, Jefferson, Orange, Harrison and Tyler Counties); Master Gardener Specialists made 2 presentations at Bell County Home and Garden Show; Master Gardeners were asked to help man the fire ant display for Dallas Blooms at the Dallas Arboretum and Texas State Fair; Three Harris County Master Gardeners volunteered to help man the Fire Ant Educational booth at the 104 KRBE Earth Day festivities held at Ellenor Tinsley Park, Houston

Slide sets, CD-Rom and videotape programs:

CD-ROMs	Title
#16	History of Fire Ant Bait Technology (SS#1412)
#14	Imported Fire Ants, Competitor Ants and Impact of Ant Bait Products, 2002 (SS#1411)
#13	Biological Control Agents for Red Imported Fire Ants, 2002 (SS#1410)
#11	Red Imported Fire Ant Management in Commercial Nurseries, College Station, TX, 2001 (SS#1396)
Slide Sets	Title
1412	History of Fire Ant Bait Technology (CD#16)
1411	Imported Fire Ants, Competitor Ants and Impact of Ant Bait Products, 2002 (CD#14)
1410	Biological Control Agents for Red Imported Fire Ants, 2002 (CD#13)
1409	Red Imported Fire Ant in Commercial Nurseries, College Station, TX, TAEX
VHS No.	Title
2559	Fire Ant Control Made Easy, Alabama, Alabama Cooperative Extension Service, 2000

Newsletters, Fact sheets/web site development:

Developed and distributed six issues of Fire Ant Trails 5(1-6) and one special issue; FAFPS038, 'Flooding and fire ants: Protecting yourself and your family'; FAFPS037, 'Considerations for developing and applying individual red imported fire ant mound drenches.'; Revised almost all of the FAFPS and FAPTFS series to include new information, agency name change and revised technical information. Web site was revised to eliminate "frames", post new and revised items. Links to related web sites and the USDA-Area-Wide Project site were established.

Educational publications, posters, and reports:

Poster: 'Red imported fire ant: biology and impact' (SP-115); 'Red Imported Fire Ant Management Applied Research and Demonstration Handbook 1997-2001'; Texas Army National Guard - 2001 Final Report 'Management Practices for Red Imported Fire Ant Populations on Texas Army National Guard Grounds'; Catalog of educational support materials available from the Department of Entomology; 'The Statewide Economic Impact of the Red Imported Fire Ant in Texas', 'Red Imported Fire Ant Highlights 1997-2003' (Texas Fire Ant Project brochure); 'Proceedings for the 2001 Imported Fire Ant Research Conference (260 pp.)' developed by Sherry Ellison and Dr. S. B. Vinson; revised L-5070 (Two-step brochure); revised B-6099, "Broadcast Bait for Fire Ant Control"; developed KIDZANTS 4-H and youth fire ant curriculum; developed die-cut for the fire ant model; revised B-6043; developing 'Identification Guide to the Common Ant Genera of Texas' (O'Keefe, Cook & Vinson)

Scientific publications:

- Completed development and submitted four manuscripts for the Southwestern Entomologist including 'in press': 1) Weeks and Drees, 'Barrier treatments for red imported fire ants, *Solenopsis invicta* (Hymenoptera: Formicidae) in commercial honey bee operations'; 2) Drees, 'A new technique for laboratory assessment of red imported fire

ant mound drench treatments' (abstract also submitted for Proceedings of the 2002 Annual Imported Fire Ant Research Conference)

- Developed proceedings article with Dr. Roger Gold entitled, 'Development of Integrated Pest Management Programs for the Red Imported Fire Ant', and submitted it to the Entomological Soc. America for review.
- Developed Supplement Issue of the Southwestern Entomologist containing reports presented at the Symposium highlighting the Texas Imported Fire Ant Project at the combined meetings of the Southwestern Branch of the Entomological Society of America, the Southwestern Entomology Society, and the Annual Imported Fire Ant Research Conference in 2001.

Committee Meetings, organization, support:

FARMAAC & FARMIC, Nov. 13 (Austin) and May 14 (College Station); final reports for FY2000-2001 Fire Ant Project's funded programs,;

Outside support, collaborations:

USDA Area-Wide Imported Fire Ant Management project; established two 300 acre plots at Five Eagle Ranch in Burleson County and far north Brazos County, NK Cattle Company; Phorid releases (Calixto) at Five Eagle Ranch; completed Progress Report and Plan of Work for USDA-ARS cooperative agreement; developed budget for FY 2002-2003.

EA-IPM, Staff Position changes, professional development:

- Met with Jeff Ripley, Ronnie Leps, Darrell Dromgoole, Ron Wooley and Dr. Pat Morrison, Oct. 8, to discuss the Travis-Williamson Co. EA-IPM (Fire Ant Project) position options for the future.
 - Met with Drs. Fehlis, K. Smith, E. Smith, B. McGee, P. Morrison, R. Frisbie, Oct. 26, to discuss the future of the Texas Fire Ant Project's EA-IPM positions.
 - Quarterly meeting for the TCE Fire Ant Project faculty/staff using the internet conference network, Polycom, on Nov. 14 and at the T-bar-M Ranch (March)
 - Revised position descriptions for Fire Ant Project Extension staff by completing AG-404 forms.
 - Working with Jeff Ripley to re-fill the Travis Co. EA-IPM (Fire Ant Project) position, incorporating program changes outlined in the Jan. 23, 2002 memorandum from Drs. Kyle and Ed Smith which streamlined supervision to 'home' counties and provides blanket travel to 'touch' counties (increasing from 6 to 31 the counties in which our EA-IPM (Fire Ant Project) conducts programs).
 - Made presentation to Dr. Charles Scifres and Dr. Frank Gilstrap, Feb. 7, with Dr. Ray Frisbie, to provide TAES administration an update on Fire Ant Project activities and to discuss plans for future activities.
 - Personnel changes: Lisa Lennon resigned; Rody Best resigned; Alejandro Calixto and Neal Lee hired as new Extension Assistants
 - Attended a training for fire ant program staff on proper operation of the ATVs, tractor and spreaders available for use in program activities. Also conducted a staff meeting to discuss curriculum activities and fall ideas.
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