

Controlling Fire Ants in the Amazon

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DANIEL WOJCIK

In early 1993, millions of fire ants (*Solenopsis spp.*) began attacking the more than 10'000 residents of Envira, a small, isolated municipality located in the Amazon basin approximately 600 miles southeast of the city of Manaus. The situation in Envira was tense because of the numerous attacks and severe reactions from the ants stinging people and animals. Especially worrisome were the attacks on children. Although no one died, many children were hospitalized as a result of ant stings. In addition, the residents were unable to raise small domestic animals because of the severe ant infestation.

The U.S. scientists then trained some Brazilian scientists and officials of Envira who later accompanied them on locating fire ant colonies. Observations were made on the location of fire ant nests and 20-25 extremely large fire ant mounds were immediately located near the centre of the town. These were some of the largest mounds ever seen by the scientists with each mound easily containing over one million ants.



David F. Williams, Research Entomologist, USDA-ARS, Medical and Veterinary Entomology Research Laboratory, Gainesville, Florida, USA

Several control methods were tried, however, none were successful. Brazilian officials, scientists and university professors were helpless and it was suggested to contact the U.S. Embassy and request the assistance of an international authority on the control of fire ants, Dr. David F. Williams, a Research Entomologist with the U.S. Department of Agriculture.

It was decided to treat infested areas with ground equipment applying LOGIC to those areas accessible with a tractor using a modified cyclone spreader and for inaccessible areas, using people operating hand spreaders and applying the bait to individual fire ant mounds. The scientific team recommended three treatments, one to be conducted immediately, another approximately 6 months later during the wet season in between rains when ant populations were more concentrated, and a third treatment one year after the initial application.

In the USA a team of scientists was assigned to help the Brazilian authorities to control the pest, and to determine why fire ants - which also infest the Southern United States - had taken hold in such an extraordinary way in Envira, a typical town in the tropics.

The scientific team emphasized that the use of Logic would be a temporary measure of relief and that the fire ants would eventually return within a year or so after the last Logic fire ant bait application unless something else was done.

The group swung into action by first contacting several companies in the United States who produce fire ant baits explaining the situation with the fire ants in Envira and because the residents were so poor, requesting a donation of fire ant bait for the people of Envira. Ciba-Geigy Corporation, Greensboro, quickly responded by donating 2,000 lbs of their bait, LOGIC, an insect growth regulator used for fire ant control in the United States.

Press coverage of the project was extensive. In addition to the large contingent of media that was on the plane with the scientists, the story was filmed and broadcasted all over Brazil and in other countries in South America. In the U.S., newspaper articles appeared in the Washington Post, Houston Chronicle, and several other newspapers. Finally, National Geographic Television who plans to air a story on fire ants in the spring of 1995, interviewed Dr. Williams about the Envira mission and may add a segment of this interview in their "Fire Ant Special".

The team then began the difficult task of planning the trip which included acquiring equipment, making plans for the transportation of the three scientists, the equipment and the LOGIC fire ant bait to Envira.

In September 1993 the three USDA researchers left Miami for Manaus, Brazil where they immediately had meetings with government officials and scientists to coordinate the expedition and discuss the problems that may be encountered in controlling fire ants in Envira as well as issues on the safety, effectiveness and longevity of the LOGIC bait. Every effort was made to begin treatments as soon as possible before the rainy season started in October-November.



Arrival of the team at Envira

Arriving in Envira (with the help of the Brazilian military) the response that the scientists received was tremendous. At least 9,000 people (most of the residents of Envira) were at the airstrip to greet the arrival of the plane.

Although there are many problems in the small town of Envira (economy, black flies, mosquitoes, malaria, cholera, etc.), the people here view the fire ant problem as a very disruptive and damaging one. The project was extremely well received by the people of Envira and Brazilian government officials. The mission was a success and provided an outstanding example of cooperation between industry and the people and governments of Brazil and the U.S. and how cooperative team efforts can

At a meeting with the residents of the town and the scientists, the interested local population was informed about the intended activities, the safety of LOGIC to people and animals, the length of time to obtain control of the ants, the amount of control



Distribution of Logic