The Federal Imported Fire Ant Quarantine

What are imported fire ants and why are they so important?

Imported fire ants (IFA) were accidentally introduced into the United States from South America about 80 years ago. Actually two species were introduced: the red imported fire ant, Solenopsis invicta, and the black imported, Solenopsis richteri. The more widespread is the red imported fire ant, which has been established in 14 states located along the south and as far west as California. The first documented sighting of the red imported fire ant in Arkansas was in El Dorado (Union County) in 1958. Now, more than 50 years later, they infest much of the southern half of Arkansas and are found in isolated areas in the northern reaches of the state.

Results from a survey in 1993 indicated that the losses in Arkansas due to the imported fire ants were around $35 million annually. These losses include actual damage, medical costs and insecticide control costs. These results are probably very conservative partially because they were obtained before two very large population centers, Pulaski and Garland Counties, became infested.

Red imported fire ants can impact the quality of life. Their painful stings pose a health threat and disrupt human activities. A single ant has the ability to produce numerous painful stings, which in a small percentage of susceptible individuals can lead to severe allergic reactions. Fire ants are also a concern to cattle and poultry producers because of their aggressive swarming behavior as they forage or if their mounds are disturbed. Occasionally, fire ants swarm and kill newborn livestock and have been shown to be detrimental to wildlife (quail chicks, etc.). Sometimes these ants will short-circuit electrical equipment such as air conditioners and the electric paddle wheels used in commercial fish production. Fire ants can construct large mounds that may damage equipment such as hay harvesting machinery.

What is the Federal Imported Fire Ant Quarantine?

Imported fire ants are spread through natural mating flights and through the transport of infested sod, baled hay, soil (alone and with other material), nursery stock, other potted or balled plants excluding house plants and used earth-moving equipment. The rate of spread through natural mating flights is relatively slow in comparison to transport through these man-made means. In 1958, the USDA Animal and Plant Health Inspection Service (APHIS) enacted a Federal Imported Fire Ant Quarantine (7CFR301) to slow and prevent the artificial spread of imported fire ants from fire ant infested (quarantined) areas to non-infested (non-quarantined) areas. Either all or part of the following states are included in the quarantined area: Arkansas, California, Oklahoma,
Texas, Louisiana, Mississippi, New Mexico, Tennessee, Alabama, Georgia, South Carolina, North Carolina, Virginia, Florida and Puerto Rico (Figure 1). Within Arkansas, 34 counties as of October 28, 2009, are included in the Federal Quarantine. These counties are Ashley, Arkansas, Bradley, Calhoun, Chicot, Clark, Cleveland, Columbia, Dallas, Desha, Drew, Grant, Garland, Hempstead, Hot Spring, Howard, Jefferson, Lafayette, Lincoln, Little River, Lonoke, Miller, Montgomery, Nevada, Ouachita, Perry, Pike, Polk, Pulaski, Saline, Sevier, Union and Yell (Figure 2). Non-quarantined counties are evaluated periodically to determine if they should be placed in the quarantine.

What agency administers the Federal Imported Fire Ant Quarantine?

The Federal Imported Fire Ant Quarantine is a USDA APHIS regulation. Inspections and enforcement are carried out by the Arkansas State Plant Board.

**Figure 1.** USDA Imported Fire Ant Quarantine Map. USDA APHIS periodically updates the map as new counties are added to the quarantine area. The most recent map is provided below. As changes to the quarantine area occur, an updated map will be available at [http://www.aphis.usda.gov/plant_health/plant_pest_info/fireants/downloads/fireant.pdf](http://www.aphis.usda.gov/plant_health/plant_pest_info/fireants/downloads/fireant.pdf).

**Figure 2.** Arkansas counties included in the USDA/APHIS Federal Imported Fire Ant Quarantine (as of October 28, 2009)
How does the quarantine operate?

To prevent the spread of imported fire ants, regulated items such as soil, potted plants, nursery stock, grass sod, earth-moving equipment and baled hay and straw may not be moved from quarantined to non-quarantined areas unless accompanied by a document that certifies certain procedures have been met to ensure that these items are free from imported fire ants. For example, baled hay or nursery stock may be moved from a quarantined area to another quarantined area or from a non-quarantined area to a quarantined area without inspections or certificates. However, to move these items from a quarantined area to a non-quarantined area (whether inside or outside Arkansas) a certificate must accompany the shipment (Figure 3).

Figure 3. USDA PPQ Certificate.

How can I legally transport regulated items from a quarantined to a non-quarantined area?

To legally transport regulated items, a certificate must accompany the shipment. Realistically, this would not apply to a homeowner purchasing a plant from their local store. However, this local vendor in a non-quarantined area should have a certificate stating that the plants have been treated or are fire ant free if they were purchased from a nursery in a quarantined area. Procedures for the movement of other items such as baled hay differ somewhat. Specific criteria must be met before baled hay is eligible for shipment. First, hay from quarantined areas that has been stored in contact with the soil is not eligible for shipment to non-quarantined areas. Hay from a quarantined area that has been stored in an acceptable manner is eligible for shipment to a non-quarantined area if it is accompanied by a certificate or limited permit issued by the Arkansas State Plant Board. Contact the Arkansas State Plant Board for more information on acceptable hay storage methods or to set up an inspection. In addition, the USDA Animal and Plant Health Inspection Service recently released a brochure entitled “Baled Hay Producers – Don’t Transport Imported Fire Ants” (Program Aid No. 1996). This brochure is intended for hay producers, brokers, buyers and transporters and describes methods to detect imported fire ants as well as practices to manage imported fire ants in hay storage areas.

As a nurseryman, what are my requirements concerning the imported fire ant quarantine?

Under a compliance agreement, a nursery operator in a quarantined county is required to be certified fire ant free or have their stock treated prior to shipment OUTSIDE the quarantine. Nurseries in the quarantined counties that are considered “fire ant free” can still require that stock being shipped from Louisiana, Texas, Alabama, etc., be treated before shipment so as to maintain their fire ant free status. At such a time that the imported fire ant is found to be reproductively established in and around the nursery site, this option would not be available. Under the compliance agreements, nurseries not considered “fire ant free” must treat the regulated article with USDA/APHIS approved fire ant control products prior to shipment to non-quarantined counties. Compliance agreements are available by contacting Paul Shell at the State Plant Board.

Nursery operators, landscapers, etc., OUTSIDE the quarantine should ensure that regulated articles shipped in from quarantined areas have been inspected and/or are fire ant free. This usually means that it was treated with a USDA/APHIS approved fire ant control procedure and product outlined in “IFA Quarantine Treatments for Nursery Stock and Other Regulated Items” (USDA APHIS Program Aid 1904).

What materials are covered by the IFA quarantine?

Potted or balled plants excluding house plants, soil alone or attached to something, nursery stock, baled hay and straw, grass sod and earth-moving equipment are covered in the quarantine.

NOTE: These regulated articles are presently being reviewed and changes might be made in the near future. Contact Terry Walker at the Plant Board (501-225-1598) if you have questions.
What are the consequences of breaking the IFA quarantine?

Since the IFA quarantine is a federal law, violations of the quarantine are considered federal offenses, and these cases would be subject to federal prosecution. In addition to this, the Plant Board does have civil penalty authority in investigating these incidences.

I find ants in some potted plants I just bought. How do I know if they are fire ants?

Fire ants are small (1/8-1/4 inch long), reddish brown ants that are very aggressive when disturbed (Figure 4). They also cause a painful sting that produces a small white pustule about 8-24 hours following the sting. Contact your county Extension agent for additional assistance in identifying potential fire ants.

Figure 4. An array of fire ants by size compared to a queen. Photo by Sanford Porter, USDA ARS.

What can I do if I live in a non-quarantined area and purchase products infested with fire ants?

First make the vendor, nursery operator or landscaper aware of the potential problem. He or she may have purchased certified plants that were somehow infested. Another option is to contact your county agent or state plant board inspector to confirm fire ant presence so that appropriate steps can be taken to close this potential route of infestation.

Consumer education is critical at this point. Retail outlets and consumers are potential routes of spread of fire ants. Regulated items can legally be shipped into quarantined counties with fire ants. The regulated items can then be purchased by consumers in adjacent non-quarantined counties who inadvertently spread fire ants into their county. The University of Arkansas Division of Agriculture, Cooperative Extension Service, has educational materials available to consumers to assist them in identifying fire ants and minimizing their impact.

Who can I contact to get information or an inspection for shipment?

Contact Paul Shell or Terry Walker from the Arkansas State Plant Board at 501-225-1598 to set up an inspection if you plan to transport baled hay from a quarantined to a non-quarantined area or if you have other questions concerning the quarantine. Please allow as much lead time as possible to set up the inspections.

For more information or educational material, contact your local Cooperative Extension Service office.

Other Fire Ant Publications

FSA7036 Fire Ant Control in Two Easy Steps
FSA7051 Fire Ant Abatement
FSA7052 Twenty Questions About Fire Ants
MP426 Managing Imported Fire Ants in Urban Areas

Visit our web site at:

www.aragriculture.org/insects/fireants/default.htm