

The Spreading of Weeds

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Weed seeds don't have feet, or do they?

Much of my recent efforts have focused on finding alternative herbicide programs to manage weeds which appear to have developed tolerance to the limited herbicides available for Louisiana sugarcane production. As I traveled to and from fields with problematic populations of weeds in Bunkie, White Castle, and St. Gabriel, I couldn't help but wonder about the potential spread of these difficult to control weeds into new fields, adjacent farms, and into neighboring parishes.

Of course, weed seeds don't have feet, but they can spread either naturally and/or by human activities.

Some plant seeds have specialized appendages to aid in dispersion. Dandelions are a great example of plants which disperse their seed with the aid of wind, and its seed can be spread for miles. Itchgrass seed are encased in a hollow seed appendage and float. A heavy rain event is just one way to spread this weed pest of cane.

Wild animals are also responsible for moving weed seeds. While weed seeds are a source of nutrition for many wild animals, studies have shown some seeds can pass through the gut intact and can be deposited in droppings, thus spreading to new areas. Seeds from plants like cockle bur and bur clover can also get tangle in animal fur and move into new areas when they become dislodged.

Humans also play a part in spreading weed seeds and weeds to new areas; most of the time unintentionally but sometimes intentionally. Itchgrass is a good example of both unintentional and intentional human dispersal of weed seed. The first reports of itchgrass was along a train track in St. Martin parish in 1927. Its seeds were collected and were intentionally planted into St. Martin parish pastures to provide a forage for cattle. Conversely, an additional method of spreading itchgrass around St. Martin parish and into the surrounding cane parishes was facilitated by the moving of wooden mats which contained itchgrass seed. These mats were used to help support oil field equipment and were moved from area to area when drilling and pipeline activities were completed. While this weed seed movement was an unintentional consequence of oil and gas production, it only represents one of many human activities capable of the dispersion of weed seeds.

Sugarcane farm machinery and equipment can unintentionally spread weed seed. Trucks, mowing equipment, tractors, plows, sprayers, wagons and combines all can be culprits. As farm sizes become larger and larger, and farming operations move into multiple parishes, and as we utilize harvest groups to expand the sugarcane industry, it is understandable to see how weeds can quickly move. Sugarcane producers and harvest groups can become overwhelmed with the many tasks necessary to prevent weed movement. The cleaning of machinery and equipment before starting field operations prior to moving to a new farm is one method of preventing the unintentional spread of weeds; however, I know this is a time-consuming task, but an important step in slowing the spread of weeds.

With the large amount of farm machinery and equipment used on multiple farms throughout Louisiana, it is important to increase weed scouting activities to quickly identify and develop a management strategy for potential new weed infestations.

While there is little that can be done to address natural and wild animal weed seed dispersal, the washing of farm machinery and equipment can be an effective strategy to slow the movement of weeds into new areas.