

Kansas Insect Newsletter

For Agribusinesses, Consultants,
Applicators and Extension Personnel



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April 14, 2000 No. 4

FLIES, FLIES, AND OTHER KINDS OF FLIES!:

In the popular press, robins are “the harbingers of spring” but, ordinarily, flies may get more springtime attention from entomologists and ranchers. But with “hardly any winter this past winter” we’ve had flies every month since March of 1999 in Kansas.

Face Flies. In many homes surrounded by pasture land (and in a few that are not so close to the source) people contend with over-wintering face flies every year. In the typical scenario, the outside of the home is plastered with flies for a few days in early October each year. Then it turns cold and they seek shelter within the home’s attic and walls. Gradually, they find their way into the interior of the home and become especially pesky during occasional warm spells in December and January. By March, they’re trying to get out and are very active around windows. Those that do get outside are not noticed any more. But this past fall and winter they were abundant and active both outside and inside of homes from late September continuously through March. There must have been an unusual number of them on cattle last September! Despite the fact that a high percentage of them burned up their fat reserves and died because the temperature kept them active, jillions of them were still alive and well this spring. For example, reports of those flies being a nuisance **inside** homes came in as late as March 6 in

Wabaunsee and Reno counties and March 7 in Pottawatomie County. On February 20 they “covered the **outside** of a home in Cloud County. On March 7, they were numerous on a home in Cherokee County and “tens of thousands” of them covered a home near Auburn in Shawnee County. On March 27, Bill Wood reported “masses of face flies” on a home in Douglas County. Watch out, cattle producers; pinkeye season may start early this year!

House Flies. A large poultry operation spread hundreds of tons of manure on fields in Rice County between mid-October and mid-November, 1999. In an ordinary fall one would not expect fly development in open fields that time of year, but (as one fellow put it) “with three months of September” the countryside was inundated by flies coming out of those fields all through November. Most of our Kansas experience with house flies emanates from cattle feedlot, dairy, and swine units and we usually don’t expect house flies to be numerous expect from mid-June through mid-September. On March 21, construction workers on a site a couple miles east of Manhattan, Kansas, complained of being bothered by hordes of flies. I expected these to be part of the unusual face fly population emerging from overwintering sites, but they were house flies.

Black Flies. “Gray gnats” might be a more descriptive term for the black fly species that has been bothering livestock lately. On March 27, Dr.

Ridley at the K-State College of Veterinary Medicine reported black flies in horses' ears north of Manhattan; on April 3, Matt Pfeiffer sent specimens from the ears of a horse in Wabaunsee County; and on April 5 a lady who lives in eastern Pottawatomie County complained on behalf of her horse. The species involved is *Simulium vittatum*. Although more numerous in some years than others, this species is bothersome from mid-march to mid-April throughout Kansas every year. There are also an early summer and a late summer generation, but they seem to be less numerous. *S. vittatum* bites mostly in the ears of horses, sheep, and cattle but may also be numerous on the necks of these hosts. This species is only an occasional biter of humans.

Control efforts at the source are not feasible as these gnats develop in running streams. Cattle and sheep can be protected with sprays of permethrin, malathion, methoxychlor, dichlorvos, or Ravap (Rabon + dichlorvos) applied to necks and ears. Horses can be protected with wipes or rubs of insecticides containing permethrin, cypermethrin, pyrethrin or methoxychlor including products such as Techtrol, Flysect, Repel-X, and Wipe.

Horn Flies. This time of year I habitually watch for first signs of horn flies. When they emerge so early that cattle still have their winter hair (and especially on cool, windy days such as we've had recently) they may be down in the haircoat and difficult to observe. I haven't seen any. Lyle Lomas reported on April 10 that they've been on cattle at the SE Agricultural Research Center "for the past two weeks." This is a bit on the early side but not surprising given that this past winter was so warm that development was probably taking place within the overwintering horn fly pupae during months in which they are ordinarily dormant. We'll still have some cold nights and inconsistent weather, so we don't expect horn flies to be numerous until at least mid-May.

Heel Flies. If you see baby calves running and jumping it's usually because they're feeling frisky. This time of year and for the next few weeks if you see yearlings and mature cattle suddenly tear out across the pasture with tails held straight up in the air they aren't just cavorting for the glory of springtime--they're "gadding." Gadding is the term applied to cattle running to escape the buzz and tickle of female heel flies hovering as they oviposit on hairs on the pasterns of the hind feet. These are the adult warbles or cattle grubs. They don't bite, but they cause panic.

By the way, when most producers (and some vets and county agents) speak of heel flies they are talking about stable flies — a biting species that draws blood from the lower legs of cattle and horses — and that we'll be dealing with mostly in May and June.

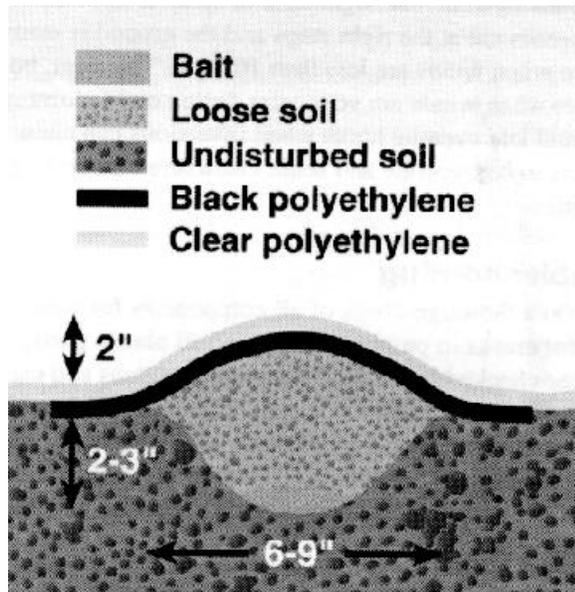
--D.E. Mock

WIREWORM PROBLEMS IN SORGHUM **— PREVENTATIVES FOR USE:**

Though this is just an occasional problem to sorghum growers, wireworm infestations can be very destructive and difficult to control when they occur. Damage occurs in two ways: (1) One is when wireworms attack the planted seed causing a lack of germination. (2) The other is when wireworm larvae attack by boring into the base of young plants just below the soil surface and tunneling in the underground portion of the stem and destroying the growing point and killing the plant. Wireworm infestations are not very predictable. Sometimes wireworm spots just appear to develop in certain fields. Sometimes there seems to be preference for a certain soil type, at other times not. The duration of the problem may be just during one year, or it may tend to be bothersome over a two or three year period. Most of the time we are not aware of the presence of unusual numbers of wireworms in the soil prior to planting. It is only after planting and

too late for preventative action when we begin to see stand problems. If wireworms appear to be the cause, you can choose to use either a seed treatment or use a soil insecticide if it is necessary to replant damaged portions of a field.

If you have suffered wireworm damage during the past year or two, you need to pay special attention to those fields prior to planting. It could be wise to conduct some preplant surveys to get an estimate of the number of wireworms before putting the seed in the ground. A baiting system developed by Dr. Armon Keaster at the University of Missouri for use on corn should work equally well for sorghum growers. This consists of placing bait stations at various places within a crop field to get an estimate of wireworm numbers in the soil. This is a simple technique. You simply dig a 6" diameter hole down about two to three inches



deep. Then into this hole, pour approximately a half of cup of a mixture of corn or sorghum or wheat seed. Presoaking the seed for about 24 hours prior to use will speed up the process. Cover the seed with soil and mound the top slightly. You want this area to be as warm as possible in order to speed germination. To do this, cover each mound with a piece of black plastic

about 18 inches square. A black trash bag can be cut up for this purpose. Then cover the black plastic with approximately a square yard of clear plastic film. Secure the edges with soil to hold them in place. The black plastic and the clear plastic helps retain the heat in the soil. Carbon dioxide is produced during the germination process and this attracts wireworms to the bait. Dr. Keaster recommends establishing two bait stations per acre, but this can get to be time consuming, so it is possible that about ten per field, if strategically placed, could give some estimate of the wireworm population. After seven to ten days or prior to planting you will need to visit each station to read the results. Remove the plastic layers and soil from bait and count the number of wireworm larvae in and around the bait. If counts average at least one larva per bait station, it suggests that an economic infestation exists in the field and some sort of preventative measure would be in order.

Preventative Options

The cheapest option is the use of a contact insecticide used as a conventional seed treatment, this could be either lindane or lindane/diazinon mixture in a planter box formulation labeled for this purpose. Some growers use this routinely. It may give variable results, and we think, less effective under high wireworm pressure.

Imidacloprid (Gaucho) is labeled as a systemic seed treatment for use on sorghum to protect against wireworms, but it is available only as a commercially applied seed treatment. You could have the problem of not being able to obtain Gaucho treated seed for the hybrid you plan to use. Dr. Keaster reported good results with Gaucho seed treatment on corn in Missouri. Limited feedback on performance in

Kansas has been mixed and not really enough to be meaningful.

Use of a soil insecticide applied at planting or replanting is another alternative. Choices would be: 1) Carbofuran (Furadan 4F). Use 2 1/3 pints of 4F in 7 to 20 gallons of water per acre (2.5 oz. per thousand feet of row) on 30 inch rows. The treated crop can not be grazed or harvested for forage or silage within 75 days of planting. See the Kansas 24-C label Number KS-880002. For wireworms make application directly into the seed furrow. 2) Terbufos (Counter 15G at 8.7 lbs. per acre or 20 CR at 5.6 lbs. per acre). Apply 15G at 8.7 lbs. per acre on 15 inch rows or the 20 CR at 6.5 lbs. per acre on 30 inch rows. Place granules in a five to seven inch band directly behind the planter shoot in front of the press wheel. NOTE: this is a band application which is sometimes not as effective as an infurrow application for wireworm control. Both Counter and Furadan are restricted use products.

GREENBUGS:

Since our last report there is not as much change as expected. We still had active infestations this week in some western areas. Some treatment was still being applied in Hamilton, Greeley, and Wallace counties. Beneficials did not develop as fast as it appeared they would at the end of March. We are not aware of problems east of the Oakley/Garden City line.

RUSSIAN WHEAT APHID:

As reported last week, we are seeing more of mostly light non-economic infestations, but some increase seems to be occurring. Symptoms of infestation are easily observed. We are trying to follow distribution. If you see symptoms anytime this spring from a county that has not been mentioned, we would be interested in knowing. I believe we have had reports from Hamilton, Greeley, Wallace, Logan, Rooks, Ellis, Osborne and Ellsworth counties. Phil Sloderbeck thinks there may be some fields with problems in Hamilton County. Dana Belshe expressed some concern over levels in at least one field in northwest Wallace County.

Sincerely,

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