

Leafminer in Wheat

In 2007 Jack Payne observed a Leafminer in a wheat plot just north of Olds College. Jack and Ken Fry collected samples from the plots to identify the insect. The flag leaf is mined along the edge (Figs. 1, 2). The larva (Fig. 3) pupates within the mine (Fig. 4). The adult emerges from the leaf in late summer (Fig. 5).

The leafminer is Holarctic in distribution, but most common in the Palearctic (Europe and northeastern Asia). The fly is well known to the Europeans. It is in the Family Agromyzidae. The species is *Cerodontha lateralis*. Spencer, in Memoirs of Entomological Society of Canada #64 lists records from across Canada, including Alberta. Normally, in Europe, this species is not a problem due to high rates of parasitism. Hosts known from North America include *Avena*, *Elymus*, *Hordeum*, *Triticum*, *Agropyron*, and *Zea*.

We found two different species of parasitoid emerging from the pupae (Fig. 6). The parasitoids are tentatively identified as *Closterocerus albipes* and *Closterocerus diastatae*.

Keep an eye out for the mines which look like Cereal Leaf Beetle damage in the early stages. The difference being the Leafminer starts along the edge with a narrow mine which eventually enlarges to a blotch toward the tip of the leaf.

We thank the National Identification Service, AAFC, Ottawa for identifying the specimens.



Figure 1. Leafminer in flag leaf of wheat.



Figure 2. Leafmine at edge of flag leaf.



Figure 3. Leafminer Larva extracted from the mine.



Figure 4. Pupa in leafmine.



Figure 5. Adult Leafminer.



Figure 6. Parasitoid in Leafminer pupa