Weeds-Alternative Approaches

Just for the record, lets remember the weather of spring, 2001. If you didn't get the crops planted before May, chances are you didn't get them planted until after May. The wet weather meant it was not a great year for the rotary hoe - perfect conditions to test flame weeding, in which a propane flame is used to singe weeds in the row. **Doug Alert and Margaret Smith**, Hampton, put their 6-row unit to work in ridge -till corn and found that flaming not only significantly reduced numbers of velvetleaf but also increased corn yield (<u>Table 11, click to view</u>).

Over the years of PFI on-farm research, cover crops have been problematic. They can be your friend, but they can also cause you problems. This is particularly true with rye, whose extensive root system both builds soil tilth and competes with, well, anything. Two cooperators in 2001 experimented with seeding rye just on the ridge, where the following crop would be planted. This limited seeding allows the planter sweep to easily remove the rye and limits the potential for moisture and nutrient competition with the following row crop. Not that moisture was a problem early in the season of 2001. In fact, rye-in-the-row may have substituted for the rotary hoe just as did Doug Alert's flame weeder.



Dick Thompson at the September Field day. Behind him is the drill used to seed a rye cover on the ridges.

Paul and Karen Mugge, Sutherland, seeded rye on ridges a month before planting soybeans (<u>Table 11</u>). After the rye was gone and the soybeans were up, Paul visually rated

grass pressure (1=good, 5=bad). Overall weed pressure was low. The difference between treatments was not significant for weeds or soybean yields; however, Paul is satisfied with the trend toward reduced grass pressure where the rye cover was used.

Dick and Sharon Thompson, Boone, seeded rye on the ridge after soybean harvest in October, 2000. As in the Mugge trial, overall weed pressure was low in the 2001 crop. The rye cover appeared to have eliminated broadleaf weeds in the corn, but the difference between treatments was not statistically significant (<u>Table 11</u>). There was no effect on 2001 corn yield from the rye cover crop.