

# TeeJet®



## FIELDPILOT® 220

### Extremely simple and incredibly affordable assisted steering



FieldPilot 220 System Components (clockwise from top):  
CenterLine 220, Steering Valve, Steering Control Module

#### Precise, accurate assisted steering

- Hydraulic steering interface for optimum performance
- 6 to 10" pass-to-pass accuracy with built-in WAAS/EGNOS GPS receiver
- Tilt compensation and gyro-stabilization to ensure accuracy on side slopes and uneven terrain
- Ideal for tillage, preplant and solid-seeded crop spraying

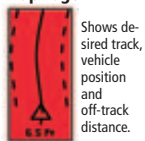
#### Easy operation

- Manual first pass, automated subsequent passes with manual headland turns
- Same intuitive simplicity as the popular CenterLine® 220 Guidance System
- CenterLine 220 console displays assisted steering information in parallel (straight line A-B) and curved A-B guidance modes
- Compact – keeps cabs clutter-free
- Easily installed and portable

#### High value, low price

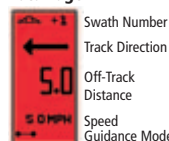
- Increase productivity with improved accuracy, lower input costs, reduced operator fatigue and improved nighttime operation
- Superior hydraulic performance at a very low cost

##### Map Page



Shows desired track, vehicle position and off-track distance.

##### Data Page



Swath Number  
Track Direction  
Off-Track Distance  
Speed Guidance Mode

Be sure to see the FieldPilot 220 in operation at the Farm Progress and Husker Harvest shows!



has become

# TeeJet®

www.teejet.com

## NewsWatch

# Take heed in contact with OP pesticides



**NURSE  
MURF**

By HELEN MURPHY

**T**HERE has been talk about restricting organophosphate, or OP, pesticides in agriculture. (Many have already been taken off the market for household use.) Why all this fuss? It relates to the growing body of evidence that they have some long-term effects on the nervous system in children. But how clear is this evidence on the neurological long-term effects?

The long-term consequences of acute OP poisoning are better understood for adults than children. First noted in the 1950s, doctors were reporting memory and attention deficits, as well as increased depression, anxiety and irritability following adult OP poisoning. Could children be similarly affected?

A recently published study tested 9- to 10-year-old school children who had been poisoned by OP pesticides at age 2. They found small, but statistically significant, movement impairments. This prompted researchers to question whether repeated low levels of exposure would have any long-term effects in children. Animal studies have shown that organophosphates disrupt the nervous system's normal growth and development. As a result, there was concern that human exposures during pregnancy and infancy may be a risk.

#### Special concerns for children

Compared to adults, children's pesticide exposure and absorption is greater, and they are also more sensitive to the health effects for several reasons:

- Little ones learn about the world by touching and putting things in their mouths. If pesticides are on their toys or hands, they are easily exposed.

- They spend more time near the ground and outside. If pesticides are in the soil or floors, crawling can expose the skin and kick up respirable dust.

- Pound for pound, children have greater skin surface, drink, eat and breathe more than adults. If pesticides

are on surfaces or in food, water or air, they will get a bigger dose than adults.

- A child's brain and nervous system grow rapidly between the second half of pregnancy and 18 months.

- Babies are less able to break down OPs into harmless substances.

#### Studies with mothers, children

Three studies — two urban and one rural — are following mother-child pairs from pregnancy through early childhood. Exposure was measured in air inhaled by the mother, in the umbilical cord blood, and in the blood and urine from both mother and child. Two studies looked at infant reflexes in the first months of life (a marker of nervous system function) and found a link between mothers with higher exposures to OP pesticides during pregnancy and abnormal reflexes in their infants.

Two studies found mothers with higher exposures to OPs during pregnancy have children who do not perform as well on mental development tests at ages 2 to 3 compared to the children of mothers with lower exposures. One found poor motor development in toddlers of mothers with higher exposure.

These studies suggest potential problems for children exposed to low levels of OPs. However, these studies do not reflect the final answer. While the effects on children exposed during pregnancy are similar across studies, they are not consistent when considering exposure in young children. Also not yet known is if these effects will persist into school age, or whether poor test results will lead to any disabilities later in life.

Nevertheless, researchers recommend erring on the side of caution while follow-up of these children continues and other studies contribute to the evidence. That means pregnant women or preschool-age children should minimize their OP exposure.

*Murphy, outreach and education director at the University of Washington Pacific Northwest Agricultural Health and Safety Center, may be reached by phone at 206-616-5906 or by e-mail at hmurf@u.washington.edu.*

## Calendar

#### September

**13-14:** The Business of Biofuels in the Pacific Northwest II conference, Mount Hood Community College, Gresham, Ore. Web site: [www.nwbiofuels.org](http://www.nwbiofuels.org). E-mail: [nikola@nwbiofuels.org](mailto:nikola@nwbiofuels.org).

**9-10:** Culinary & Agritourism mini-conference, Grand Junction, Colo. Contact: Doug Caskey. Phone: 720-304-3406.

#### December

**11-13:** Colorado State University Range Beef Cow Symposium, Larimer County Fairgrounds (The Ranch facility), 25 miles south of Fort Collins, Colo. Contact: Jack Whittier. Phone: 970-491-6233. E-mail: [jack.whittier@colostate.edu](mailto:jack.whittier@colostate.edu).

**21-26:** National Association of State Departments of Agriculture annual meeting, Westin Hotel, Seattle. Web site: [www.nasda.org](http://www.nasda.org).

#### October

**3-5:** U.S. Pea & Lentil Trade Association annual meeting, Cal Neva Resort, Crystal Bay, Nev. Phone: 208-882-3023. E-mail: [kmonk@pea-lentil.com](mailto:kmonk@pea-lentil.com).

■ For more calendar items, see our Web site at [www.westernfarmerstockman.com](http://www.westernfarmerstockman.com).