



It's Really Going Places.

*Best Management Practices*

## European Crane Fly

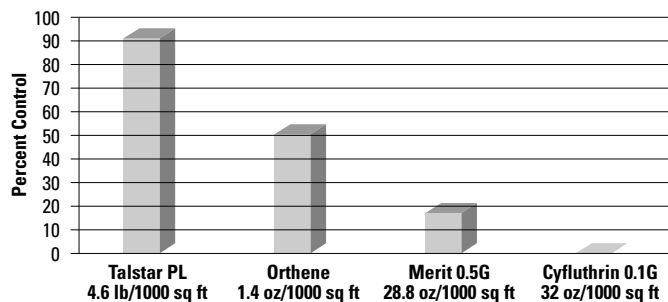
**Background:** The European Crane Fly, *Tipula paludosa*, often called leather jacket, is a significant turf pest of the northwest United States, ranging from Vancouver down to south of Portland Oregon. The larvae of the crane fly live in the turf thatch and feed primarily on grasses of lawns and pastures but have also been known to feed on strawberries, flowers and vegetable crops. When feeding below the surface, the larvae mainly attack root hairs, roots and crowns. At night, the large larvae will migrate to the soil surface, disrupting the soil surface and killing young seedlings. When above ground, they will feed on stems, grass blades and leaves. In the spring, turf can be severely damaged by the emerging larvae, causing small irregular brown patches that can be misdiagnosed as disease damage. In the fall, damage can occur from large levels of infestation of newly hatched larvae.

**Description:** Adult European Crane Flies resemble overgrown mosquitos with extremely long legs. They are 3-4 inches long and occur primarily in damp locations where vegetation is abundant. They emerge shortly after sunset, finish mating by dawn and lay eggs by dawn of the same night. The adults do not feed but after mating lay their eggs in moist turf. The eggs are shiny black and about 1/3rd inch long. The larvae are light gray to greenish brown and have irregular spots. The insect over winters as a larvae and feeds vigorously from April to mid May. They remain inactive until mid-July when they pupate and emerge in late August and September. Eggs hatch within 11 -15 days and the larvae begin feeding until late November, overwintering primarily as third instars

**Management:** Management of crane fly infestations is best accomplished by treating the larvae in the spring or fall. Spring applications should be made in March - April with Talstar® PL granular insecticide or Talstar® EZ granular insecticide at 4.6 lb /1000 sq ft. In areas with high infestations, an application of Talstar® PL granular insecticide at 4.6 lb/1000 sq.ft. is recommended in October - November.

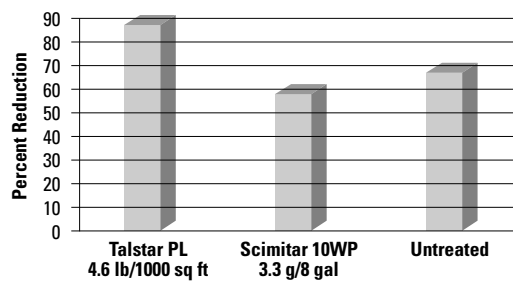
Do not exceed an annual application rate of 4.6 lb/1000 sq.ft. of Talstar® PL granular insecticide.

**Control of Crane Fly with Talstar® Fall Application Timing**



Application applied 11/15/2000; Evaluated 1/15/2001

**Control of Crane Fly with Talstar® PL Spring Applications**



Applied 3/15/2001; Evaluated 4/13/2001

**Always read and follow label directions.**

The FMC logo is a registered trademark of FMC Corporation.  
Talstar and TalstarOne are registered trademarks of FMC Corporation.  
Orthene is a trademark of OMS Investment, Inc.  
Tempo is a registered trademark of Bayer Ag.  
Scimitar is a registered trademark of Syngenta.  
© FMC Corporation. All rights reserved.

P3167R 11/03