



Altosid® and *Culex* Control

The recent appearance of the West Nile Virus may change the way mosquito control is performed in the Eastern USA. The *Culex* mosquitoes, that vector the virus, historically have not been the targets of operational control measures because they were considered minor nuisance pests, and not important as disease transmitters. The philosophy on *Culex* is very different for mosquito control agencies in the Midwest USA. The same *Culex* species in the Midwest are potential carriers of endemic St. Louis Encephalitis (SLE) virus, and are a major target of control measures. Altosid solid formulations have always been the larvicide of choice for application into *Culex* habitats in the Midwest.

While stagnant water is present, *Culex* female mosquitoes will lay eggs on a daily basis. Every day eggs hatch and newly emerged adult mosquitoes fly away to feed on birds, animals, or humans.

To prevent the development and spread of SLE virus, State, county, and local municipal mosquito control agencies in the Midwest, have seasonally treated catch basins, storm sewers, culverts, sewerage lagoons, and other standing dirty water habitats. Altosid® briquets and pellets are the products of choice for treating *Culex* in these habitats. Prior to treatment, these areas are mapped and then treated with either the pellets or briquets. Residual control can last from 30 to 150 wet days depending on formulation. In some storm sewers, the water in the sumps never dries out, making them highly productive *Culex* breeding sites. In these situations treatment is performed once a month with the 30 day briquet or once per season using the 150 day XR briquet. McCarry¹ (1996) showed that 7 grams per basin of Altosid Pellets gave control of *Culex pipiens* and *restuans* for 15 weeks in catch basins.

If the water in a *Culex* breeding site dries out, the Methoprene IGR (Insect Growth Regulator) in Altosid stops being released until the next rainfall event. Once wet, the IGR is released again to continue preventing further mosquito emergence. The longevity of Altosid in the habitat eliminates the need for weekly inspections and re-treatments that are required with other short-lived larvicides. Using Altosid saves time and manpower when fighting *Culex*.

Using Altosid saves time and manpower when fighting *CULEX*, and if used in their habitats, may help prevent the spread of WNV in the eastern USA.

Advantages of Altosid for *Culex* Control

- Residual control not dependent on initial larval population size.
- Can be used as pretreatment into a dry habitat.
- Continues to control *Culex* under changing wet, dry, wet conditions.
- Controls all *Culex* pest species by preventing adult emergence and will control early 4th instar larvae.
- Excellent vegetation penetration of pellets.
- The pellets, XR and 30 Day briquets sink, and will not float out of habitat.

