

## SENCOR DEMONSTRATION BRUNO ZIRK

Chemagro Ltd. is a division of Miles Corporation of USA which in turns is a division of Bayer, Germany. Miles was formerly known as Morbay Corporation. Miles produces the Sencor for us here in Canada at the production plant in Kansas City. There are two formulations and three packaging types:

1. Sencor 500 Fl, that is a liquid flowable.
2. Secor 75 DF, that is a dispersible granular formulation.
3. Sencor Solupak, is the 75DF dispersible formulation in water soluble plastic pouches.

### SENCOR PRODUCT PROFILE:

Mode of action: Sencor kills by blocking photosynthesis, inhibits hill reaction, kills susceptible weeds when photosynthesis begins, does not prevent seed germination.

Behavior in soil: Sencor is absorbed on soil with high clay and high organic matter. Absorption decreases as PH or salt increases. Micro-organisms: major method of breakdown fastest breakdown in warm moist soil under aerobic conditions. Half life is 1 - 2 months during a normal growing season.

Behavior in/on soils: Losses due to photo decomposition and/or volatilization are not significant under field condition. Due to this fact and the mobility of Sencor with water makes it an ideal candidate for fall application in direct seeding or zero till.

Sencor is registered for many crops such as potatoes, cereals, fababeans, but my main emphasis will be on lentil and peas. Sencor controls a number of broadleaf weeds such as stinkweed, wild mustard, and shepherds purse (preplant) and in combination with trifluralin and ethylfluralin controls a large number of broadleaf and grassy weeds.

Sencor research and demonstrations conducted in Saskatchewan and Manitoba have shown that broadleaf control could be enhanced by using split-shot applications and early post emergent spraying. This split-shot application is now registered for peas and lentils.

Preplant combinations of Secor plus trifluralin or ethylfluralin fall or spring have shown to give nearly total weed control in peas, except for perennials like quackgrass and Canada thistle. Registrations for Sencor with the above combinations were obtained in 1991. the fall preplant combinations are now being researched and demonstrated for lentils.

More preplant work has been done with field peas and the following is a general summary of the options available:

1. Sencor fall preplant with trifluralin or ethylfluralin generally gives the highest yields and best results.
2. Sencor combination spring preplant with trifluralin or ethylfluralin also give good yields but require good moisture. Spring applications can dry out soil.
3. Fall or Spring trifluralin or ethylfluralin followed by Sencor early post-emergent or split-shot is usually satisfactory but spring application can dry out the soil.
4. As above but applications of plus MCPA-MA or MCPA Amine usually lowers yields because of crop injury from phenoxy and poor weed control.
5. Sencor early post or split-shot plus grass killer sequentially usually lowers yields because of early grass competition, wild buckwheat not controlled but there are exceptions.

Future work with Sencor will be to develop a granule for fall preplant, direct seeding and zero till applicatins.