Thanks to New York’s table beet growers and processors along with swift activity on the part of DuPont, Bayer, and especially the DEC we have available for use this season Nortron and UpBeet herbicides. They are both 24C SLN (special local needs) registrations. Applicators need to have copies of both the 24C and full labels in order to use the products because the 24C’s do not have information regarding application details, planting restrictions, and cautionary statements. Copies of the labels are available under the Special Registrations Section of the Cornell PIMS web site (http://pims.psur.cornell.edu).

A weed management plan for table beets in New York should include:

- A whole farm plan where weed issues are managed in rotational crops and with weed suppressing cover crops in the years prior to planting beets.
- Pre-emergence herbicides – Dual Magnum. Combination with Nortron should be tried for control of a wider spectrum of weed species. Note the potential for crop injury with these products under certain environmental conditions.
- Cultivation
- Post-emergence herbicides. There are no good stand-alone products, so combinations of SpinAid, Nortron, UpBeet and Betanex/Alphanex (if available) should be applied when beets and weeds are small. Stinger and Select Max can also be used when specific weeds need to be controlled.

Further information on the available herbicides for 2012 can be found in the text and 2012 Beet Herbicide Table listed as a separate pdf file on this website. Make sure to read the labels for full details.

**DUAL MAGNUM 7.62EC**
Dual Magnum is one of the most widely used pre-emergence herbicides in vegetable crops. It predominantly controls annual grasses but also some key broadleaf weeds as well, e.g. redroot pigweed, galinsoga, and eastern black nightshade. Yellow nutsedge is also significantly suppressed. Under cold, rainy conditions beets can be stunted as they emerge and occasionally stands are reduced. With the loss of Pyramin and the cost of RoNeet, the use of Dual Magnum as a primary pre-emergence management tool will most likely increase.

**NORTRON 4SC**
This herbicide has both pre-emergence and post-emergence activity largely on annual broadleaf weeds. Some important weeds that are controlled or suppressed include wild buckwheat, smartweed species, pigweeds, and the foxtails. Pre-emergence applications do not require incorporation and can have residual activity of 5 to 6 weeks. Cornell research in the 1990’s tested 1.0 and 2.0 quart rates and generally injury was low and rapidly outgrown at the higher rate. Injury observed included some loss of stand, stunting, and occasional downward cupping of early leaves. Weed scientists in Oregon and Michigan have reported more significant injury with the 2.0 quart rate and frequently attribute this injury to soils having high amounts of sand. The 24C SLN for New York lists 60 fl. oz (2.1 quart) for the pre-emergence rate.

Post-emergence applications are intended to be applied together with Spin-Aid, UpBeet, Stinger, and formerly, Betanex/Alphanex. The current sugar beet label states that Norton should NOT be applied alone. These 2 and 3 product mixtures are called ‘micro-rate’ applications. They are intended to be applied when the weeds are very tiny, cotyledon to 2 true leaves and...
are to be applied when the beets have 2, 4, and 6 leaves, roughly every 7 to 10 days. The rates for use in New York are 5.25 to 10.5 fl. oz depending on the size of the beets at the time of application. Also, specific to New York’s 24C is the restriction to making no more than 2 applications per acre per season. Thus, Nortron could be applied pre-emergence and followed by one post-emergence application later or it could be applied twice to emerged weeds with the other post-emergence herbicides. Adjuvants are not used in mixtures that include Spin-Aid or Betanex/Alphanex as these products are emulsifiable concentrates. If applied with UpBeet or Stinger, then adjuvants are recommended. See labels for specific details. The label does not list a PHI for this product.

**UPBEET 50WG**
UpBeet has only post-emergence activity and provides excellent control of several broadleaf weeds. This herbicide will be of interest to growers who have had problems with velvetleaf. Other weeds controlled include wild mustards, wild radish, and smartweeds. Like post-emergence Nortron, control of multiple weeds increases when UpBeet is applied together with the other post-emergence herbicides at the 2, 4, and 6 leaf stages. It is applied at 0.5 oz/A when weeds are tiny, cotyledon to 2 true leaves, and also requires adjuvants when applied with Nortron and/or Stinger but not with Spin-Aid. The PHI for this product is 30 days.

**SPIN-AID 1.3EC**
Spin-Aid is a key component of the sugar beet ‘micro-rate’ application program mentioned above. The rates used range from 1.5 to 3 pints/A depending on the number of beet leaves present. Occasionally beets will show slight injury, leaf chlorosis or tip burn after application, but recovery occurs within a week or two. Weeds are most successfully controlled when they are tiny, cotyledon to 2 true leaves. Spin-Aid is one of the only beet herbicides with significant activity against common lambsquarters. Some of the other well controlled weeds include: common chickweed, c. purslane, c. ragweed and annual sowthistle. This herbicide does not require the use of adjuvants. The PHI for beets is 60 days.

**STINGER 3L**
Stinger has a fairly narrow spectrum of weed species controlled and should only be used if those species are problematic in a given field (based on scouting). Stinger has primarily post-emergence weed control activity but does remain in the soil for an extended period of time and due to this has specific crop rotation restrictions. It is important to review these on the product label. Stinger is noted for excellent control of common ragweed, galinsoga, nightshade species, wild buckwheat, prickly lettuce and annual sowthistle. It also does a good job of suppressing Canada thistle and dandelion. Stinger may be applied twice per season, to beets having 2 to 8 leaves at rates of 0.25 to 0.5 pint/A with a total of 0.5 pint being applied. The product label states that adjuvants are not required for applications of Stinger; however, they are sometimes used when mixed with Nortron and UpBeet. The PHI for Stinger is 30 days.

**SELECT MAX**
Select Max is a post-emergence herbicide with activity against many annual grass species. The use rate is 9 to 16 fl. oz, with no more than 64 fl. oz/A per season. NIS at 0.25% (v/v) is recommended. The PHI for Select Max is 30 days.