Vegetable Advisor

A TerraLink Technical Advisor

Sweet Corn Edition: Part 1

May 2018

Industry Information

Sweet Corn in British Columbia

According to 2016 Census Canada information, there are about 2,600 acres of sweet corn in BC, about 2,000 of which was grown in the Fraser Valley that year. Since these numbers are based on voluntary reporting, it is probably a safe bet there is at least double that acreage actually grown. Obviously sweet corn is a popular crop. Many producers see it as a "quick buck" kind of crop. Under that self-imposed attitude, it is no surprise that not a lot of planning seems to go into sweet corn production. To that end, we have dedicated this publication as a Sweet Corn Special edition of the Vegetable Advisor. Hopefully you will find this brochure full of guidelines and good ideas to help you produce as high a yield as possible of big, full cobs of this consumer favorite.

Agronomic Production Tips

Factors in Sweet Corn Production

Many first-time corn growers probably find themselves surprised to discover that growing sweet corn successfully can sometimes be far from simple. Based on an article in a recent edition of Top Crop Manager*, we summarize here some factors to keep in mind when growing sweet corn.

Optimize Plant Population

What point is there in spending money on crop inputs, without planting the maximum number of corn plants per acre? The more plants grown, the more marketable cobs you will produce. But, too many is detrimental. For sweet corn, a common row spacing is 30 inches between rows, and the maximum plant population is about 21,000 to 26,000 plants per acre, based on the BCMA guidelines of in-row plant spacing of 8 – 10 inches.

Stand Establishment

An early stand means high vigour. Unless you are planning on using floating row covers, do yourself a favor and don't plant too early. If you do, you risk the emergence of weak plants, which are more prone to root and crown pathogens. The minimum soil temperature should be no less than 10 degrees C. Plant seed no deeper than 1.5 inches.

Weed Control

We separated weed control out from Stand Establishment, for a good reason. In our experience, way too many producers try to skimp on weed control. Corn that is competed by weeds when the corn is young will not recover to produce a maximum crop. When weeds get past 4 inches, your yield will be definitely reduced. Don't let bad weather cause you to skip crucial weed control opportunities. Plan ahead. Start with pre-planting incorporated herbicides if they are available. Follow with a "plan B" pre-emergence application. Finally, get the big guns ready; you must assume you will be applying post-emergence herbicides. If necessary, do all three.

Insects

Gone are the days when we didn't have to worry about bugs in corn. Happily, so far, we still don't have diseases, to speak of. But insects – different story! If you have to apply insecticides to your stand after knee-high, it is better to achieve control then worry about losing some plants by "bulldozing" with your spray rig.

a) Wireworm. You have to know if you will expect wireworm; there is not much excuse not to have done your homework. Rotating will make some difference. Definitely do not grow corn after corn; that is just asking for it. If you think you will have some, use Force 3G at planting.

a) Aphids. In sweet corn, aphids will on and off be a problem. Be ready. In a year when aphids are a problem, there are inexpensive insecticides you can use.

a) Western Corn Rootworm. We avoided this pest for many years, but now it is definitely here. You must plan for it. Unlike the cow corn growers, there aren't any "stacked" hybrids with genetic protection built-in. But, ask your seed supplier if your variety has been treated at source for rootworm.

a) Other lepidopterans. In 2017 some growers had a problem with Armyworm. It may have been a fluke – it definitely wasn't expected, and may have accidentally been brought in as a "hitchhiker". In any case, until you know better, you have to, again, assume you will have to deal with it. Again, there are insecticides you can use to deal with it.

***Reference:**

"Agronomy Tips for New Corn Growers", by Bruce Barker, in Top Crop Manager, December 2017.

Plant Nutrition

Corn Fertilizers from TerraLink

The best strategy related to planning how to feed your upcoming corn field is to take a soil sample and send it to the Plant Science Lab at TerraLink's Abbotsford office. Not only will you be given an agronomic recommendation of how best to feed your corn, it has been proven repeatedly that a soil test saves you money. How? By helping you to avoid applying nutrients that are already in sufficient quantities in your soil. Why spend money on what you don't need?

pH is as critical for an annual vegetable crop as for perennial berry crops. When your soil acidity is not in an optimum range, some of the fertilizer you spend money on will be wasted. Make sure to check pH before planting.

If your soil test shows you lack potassium, you can easily take care of this nutrient requirement ahead of planting. Potassium is largely immobile in the soil, so you can apply really as much as necessary as a broadcast application and disc it in before planting the field. To that end, TerraLink stocks straight muriate of potash (0-0-62), sulphate of potash (0-0-50+17S) and a variety of high potash blends. If you know you will also need magnesium, you can apply 0-0-22+22S+11Mg.

Most or all of the requirement for phosphate should be applied at the time of seeding. This is typically achieved by what is called a "2 x 2" spatial relationship between the seed and the fertilizer. If you were to be in the soil at the level of the seed, and then look along the row lengthways, the fertilizer would then be banded 2 inches to the side and 2 inches below the seed. Often, a little nitrogen, potash, magnesium and sulphur can safely accompany the phosphate. Also, a large concentration of phosphate can reduce the absorption of boron, especially in acidic soils. All TerraLink's high phosphate planter blends therefore contain a small amount of boron. Consider using one of 9-40-4, 14-28-6 or 11-18-14. These are all standard stocked blends. All of them contain boron, zinc, magnesium and sulphur as well.

Some of your nitrogen needs can be taken care of before seeding, along with potash, especially if you are farming a coarse soil with a low soil test level for N. Otherwise, submit samples for our Pre-Sidedress Nitrate Test, a fast lab test that will advise you precisely how much nitrogen is recommended for sidedress before the corn is at knee-high stage. A large variety of nitrogen fertilizers are available stocked at TerraLink to to suit your nitrogen requirements.

If a micronutrient nutritional deficiency is detected in the foliage of your corn, any micronutrient can be applied as a foliar sprayed application. Again, TerraLink stocks a wide variety of sulphate-based or chelated micronutrients, whether powders or liquids.

If you have questions about corn nutrition, please inquire with either TerraLink Sales Desk. Call Abbotsford at the toll-free number 800-661-4559, or Delta at 604-946-8338.

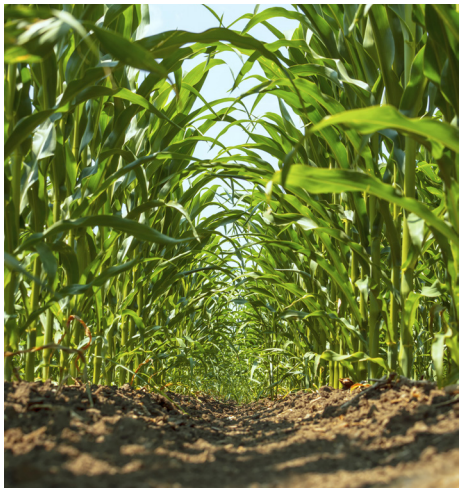
Agri-Plastics

Earlier Corn with Floating Row Cover

TerraLink is the exclusive Western Canadian distributor for Novagryl Plus (reinforced edges), Novagryl regular as well as the older Agryl P 17 and P 30. Floating row covers have been proven to help provide an earlier crop. A jump on the market normally means more profit for you. In organic production, floating row covers provide insect exclusion as a form of pest control. Order now to assure availability of the sizes you need. Regular stocked items include:

Product	Size	Code
Novagryl Plus	10.5 x 250 m	3764700
Novagryl Plus	12.8 x 250 m	3764720
Novagryl Plus	16.0 x 250 m	3764760
Novagryl Plus	20.4 x 250 m	3764790
Novagryl Regular	6.6 x 250 m	3765070
Agryl P 17	4.0 x 250 m	3766540
Agryl P 17	2.2 x 250 m	3766460

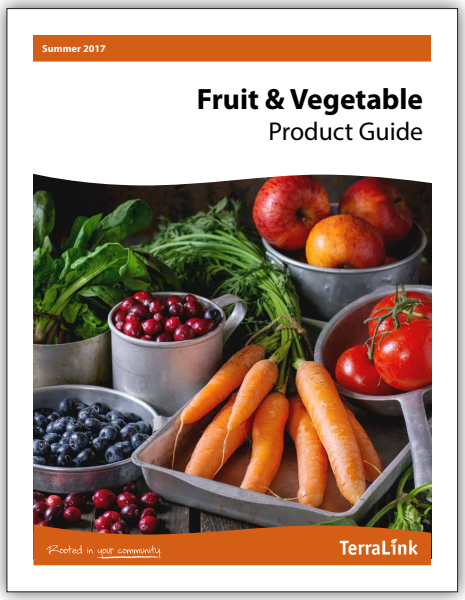
NOVAGRYL



NEW!

Fruit & Vegetable Crop Inputs Product Guide

Next time you are in the TerraLink website, make sure to view a copy of our new Fruit & Vegetable Crop Inputs Product Guide. It contains all possible crop products offered by TerraLink for use by producers of any fruit or field vegetable crop. From nutrients, crop protection, crop covers to organic soil supplements, you will be able to find it in this new guide. Or, pick up a hard copy next time you find yourself having a coffee with the staff at one of our Sales Desks in Abbotsford or Delta.



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