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Renovation 2000

As soon as harvest is over we must begin renovation. It is critical to get the berries renovated as soon as possible. A berry crop that has gone through a large harvest has burnt out a lot of reserves and it needs to be revitalized. The longer that we prolong this the more damage that will be done to the root system and crown. The sooner we get this plant built back up, the better the bud set and yield next season. The work we do at this time of year will make or break our yields next season.

Before you begin to renovate the berries examine the crowns and assess the health. If hou have any fields with 75% or more damage to the crown and the crown is dark and root system is black, I would suggest not mowing off the tops or mowing very lightly.

Although mowing stimulates regrowth and cleans up a lot of trash and insects in these cases it may cause more damage.

Some varieties such as Jewel, Annapolis and Lester also do not renovate well and when mowing I would suggest that you mow these varieties high.

Before renovation begins as soon as you are finished with a field water in 20 pounds of urea with ¼ inch of water. This will start the regrowth process.

If your herbicide program has slipped now is a good time to clean up weeds such as dandelion. Although I do not like to use 24-D on strawberries because it can damage the crown in some extreme cases where the dandelion is taking over it is necessary. Only apply 24-D to the crop when the plants are dormant. This is a problem with the program that I promote because I do not want the plants to go dormant at this time.

If dandelion is a big problem then 2-4 D amine can be applied at 3 pints per acre. This is effective for most broadleaves. Don't mow foliage for about five days after this application. This is also a good time to clean up fence lines and roadways that have a heavy population of dandelion.

If the berries are not dormant and dandelion population is not too bad removing them by hoe is the best solution. However these weeds like everything that we do to the strawberry and are likely very healthy and difficult to remove. The best way to hoe them is to first treat them with a small hand sprayer (windex bottle) of 2-4 D leave them for 3-5 days and then hoe. The 2-4 D will make them much easier to dig out.

If weed pressure is not bad it is best to put off herbicide application until after renovation when seedlings begin to emerge

Due to the amount of water that we use and compaction that we have in most of our fields it is good to subsoil at this time, but wait until the renovation process is complete. Subsoil the middle of the rows taking care not to lift or move the soil too much as it will break off roots or create weak spots on the crown that will be open for infection. Also moving the soil too much destroys the capillary action of the soil.

The strawberry will grow a new crown and it will extend about ½ to ¾ of an inch so that it is important that during the renovation process we rototill the middle of the rows depositing about ½ an inch of light soil on top of the crowns. This will protect the crown form wind and winter damage. Be careful not to cover the crowns too much however, this could suffocate the crwons and kill them out.

Healthy Crown

Unhealthy Crown

In all the processes from renovation to application of fertilizer and gypsum and covering the strawberries with straw it is important the the machinery you are using fit down the rows. Wagons and tractors that ride on the rows or shift the ridges create a shearing action on crowns and roots that again will open the crown to infection.

Hopefully all have a new soiltest that can be used to make fertilizer recommendations at renovation. However if you have not had time to get soils to the lab you can not afford to wait at this time.

The complete fertilizer program for renovated strawberries is a two stage process. The first application of fertlizer will have about 40 pounds of N plus P and K as per soil test. The second application should be applied at the end of August or early September. If a soil test is not available at this time I will make a suggestion of the fertilizer to apply and this can be added to in the second application based on the soil test.

If you are taking a soil test after renovation make sure that you get the samples before application of fertilizer during renovation or wait at least 4 weeks after the application has been made.

The fertilizer application at this time is a combination of Calcium Nitrate and Potassium Nitrate. The reason we use this material is that it is fast acting and quickly available to the plants. Amonium Nitrate and Urea are cheaper but in some seasons will not become available fast enough. We will use this material in the second application.

The standard recommendation at this time is the following and any one that has a not obtained a soiltest at this time should go ahead with the Nitrogen application and address the other requirements at the second application.

Potassium Nitrate	100 lbs/ac
Calcium Nitrate	200 lbs/ac

This apppication should be banded over the row in a 12 – 18 inch band and watered in with ½ to ¾ of an inch of water if you haven't received at least ½ an inch of rain since the plants where mowed. Anyone who did not apply the 20 pounds of Urea before beginning renovation should apply 10 pounds of Urea at this time with the water application.

This banding technique is what I discussed in the winter fertilization newsletter and it pays to have this equipment. If you do not have a band applicator and broadcast at this time you will require 2 ½ times the amount of Potassium

Nitrate and Calcium Nitrate which becomes expensive.

In some areas Potassium Nitrate is difficult to find and I recommend a substitution of the following.

Calciuim Nitrate	300 lbs/ac
Sulfate of Potash	100 lbs/ac
Or	
Sulfate of Potash Magnesia	180 lbs/ac

The choice of Potassium is dependent of Magnesium levels in the soil.

The next application of fertililizer will take palce in 4 to 6 weeks and will include Urea and other nutrients depending on the soil and tissue test and history of the field.

Strawberry crown health and fruit quality is an ongoing battle. I have found that an annual application of gypsum greatly increases root growth, crown health and fruit quality. Calcium and Sulfur are two nutrients that are difficult to get into the strawberry and this application is an affective way of addressing both.

The recommendation for gypsum application is 500 pounds per acre if banded over the row with a granular gyspum or 1500 pounds per acre of Ag gypsum broadcast.

Gypsum application at this time is the best because the renovation program will incroporate it into the soil. At this time field conditions are usually the best and we have less damage to the rows. Take care not to run on the rows or cause slippage when using heavy equipment in the fields. In some cases I see a lot of damage to the crowns where the equipment has pushed the ridge over and broken roots and crowns.

If you have not sourced out gypsum do not wait for this application the renovation process has to go ahead. Gypsum can be applied at a later date.

Boron Application

Strawberries require a lot of Boron. An application of 1 pound per acre (5 pounds of Sol U bor) should be applied at this time and watered in. Boron will help stimulate new root growth.

This whole process should take no more than 4 days from the time the plants where mowed off.

Renovated strawberries will require 1 inch to 1 ½ inches of water per week during July and August and depending on the season ¾ to 1 inch of water from Septmenber on.