

## **Renovation of Strawberries After Harvest: Considerations With Extreme Hot Weather Conditions**

Renovation is the management process of regenerating June bearing strawberry planting after harvest to keep the planting for an additional cropping year. This typically involves applying a fertilizer, applying post or pre-emergent herbicides, rototilling between rows (to narrow), mowing off old growth leaves and irrigating.

Renovation is most successful if the plants are vigorous. Renovation is not used on plantings in the establishment year or on day neutrals. Once the last picking is over, fields of June bearing plants should be renovated immediately to attain maximum regrowth in the late summer and short fall season. A week's delay may well mean a greatly reduced crop the following year.

Strawberry plants tend to enter a stage of low activity toward the end of harvest. Renovation stimulates renewed growth and eliminates weaker older leaves which compete for fertilizer, moisture and light.

However producers have sometimes observed negative effects from mowing. This can be caused by an unusually long harvest period, which leaves less time for the development of a new, full-foliage canopy, or by mowing too close to the crowns, especially during abnormally hot weather.

If extreme hot weather conditions ( i.e. temperatures above +30-35°C) are forecasted in the next 7-10 days after renovation mowing is completed special care should be taken when mowing to avoid mowing too close to the crown. If the crown is fully exposed during extreme hot weather it may cause heat stress to the crown and hinder regrowth of the plant.

Recommendations on renovation mowing in extreme hot weather conditions:

- If the canopy is quite thick producers could only mow off the top layer of leaves, leaving lower layer of leaves intact. Would still be opening up the canopy somewhat but keeping enough leaves to provide some shade for the crown.
- If the canopy is quite thin or plants are not vigorous, i.e. limited leaves over the crowns, producers may consider skipping a renovation mow completely if extreme hot weather is forecasted for the next week to 10 days. With the less dense leaf canopy over the crown there still should be sufficient light reaching the crown combined with sufficient irrigation to promote growth of new leaves.

## Suggested June-Bearing Strawberry Renovation Steps

1. After the last picking, apply nitrogen, phosphorus and potassium based on soil test recommendations.
2. Mow the tops of the plants to remove old leaves without cutting the new expanding growth. This usually occurs at a height of 2.5 to 5 cm (1 to 2 in.) above the crowns.

One advantage of mowing is the development of a younger, more efficient leaf canopy. This rejuvenated canopy is more effective for “recharging” the plant energy systems of fruit formation and the over wintering food reserve buildup. Mowing also offers disease and insect control benefits, especially if the old leaves are removed from the row.

3. Narrow the rows using a rotovator or between row cultivator on either side of the row, followed by raking to move unrooted and weakly-rooted plants into the aisle. This practice prevents plants from encroaching on the aisleway. Spacing of plants with mature crowns should be 15 to 23 cm (6 to 9 in.) apart in the matted row.
4. Applying recommended herbicides at renovation as an overall or banded spray can slow down the regeneration of the strawberry plant. Some hand weeding or herbicide spot treatment may be preferred to minimize plant stress. A post-emergent herbicide such as Lontrel is applied before mowing and mowing is delayed 7-10 days.
5. Irrigate thoroughly and repeat as necessary to maintain sufficient moisture for vigorous growth.

For more information contact the ARD/MASC Service Centre at 1-844-769-6224 or email: [crops@gov.mb.ca](mailto:crops@gov.mb.ca)