

Straight Talk About Growing Healthy Strawberries

Mark Bolda

UC Cooperative Extension

Introduction

- Review of cold conditioning and what it means to the grower.
- A review of correct planting.
- Current salt issue in berries.

Chill requirement

- Chill requirement is the cumulative period, normally measured in hours below a certain temperature, necessary to produce the internal changes in the strawberry plant which result in a normal sequence of growth which follows hibernation.
- In strawberry, hours accumulated from 28 to 45 degrees Fahrenheit are considered to be effective and count towards the chill requirement.

Chill: Two Parts

- Field Chill: What the plant accumulates prior to harvest.
- Supplemental Chill: The accumulation of chill after harvest and the plant is in the cooler.

Chill: Key Points

- Generally, growers should know that a high degree of chill results in more vigor, which means to say more vegetative growth, and less fruit production. Less chill, on the other hand, means a plant with less vigor.

One more point

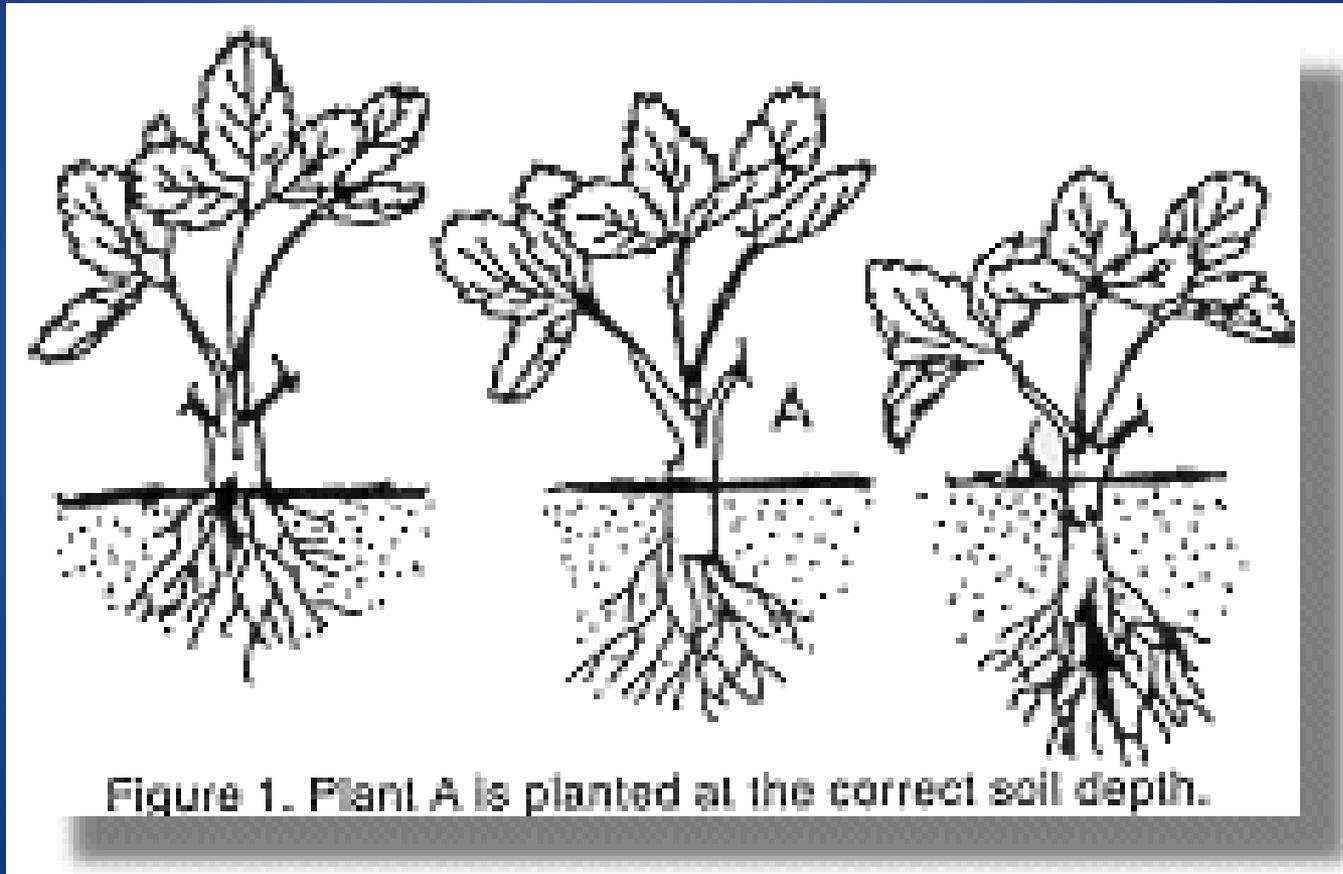
- The challenge of the grower is to obtain sufficient chill for his or her variety, but still be able to plant early enough so that the plant can establish itself sufficiently.

Supplemental Chill Times for Several UC Varieties

| Variety | Type | Supplemental Chill |
|-------------|-------------|--------------------|
| Albion | Day neutral | 10-18 days |
| Monterey | Day neutral | 10-18 days |
| Camarosa | Short day | 0-7 days |
| Chandler | Short day | Less than 7 days |
| Diamante | Day neutral | 10-21 days |
| San Andreas | Day neutral | 10-18 days |
| Portola | Day neutral | 10-18 days |

From UC publication 3351 "Integrated Pest Management in Strawberries"

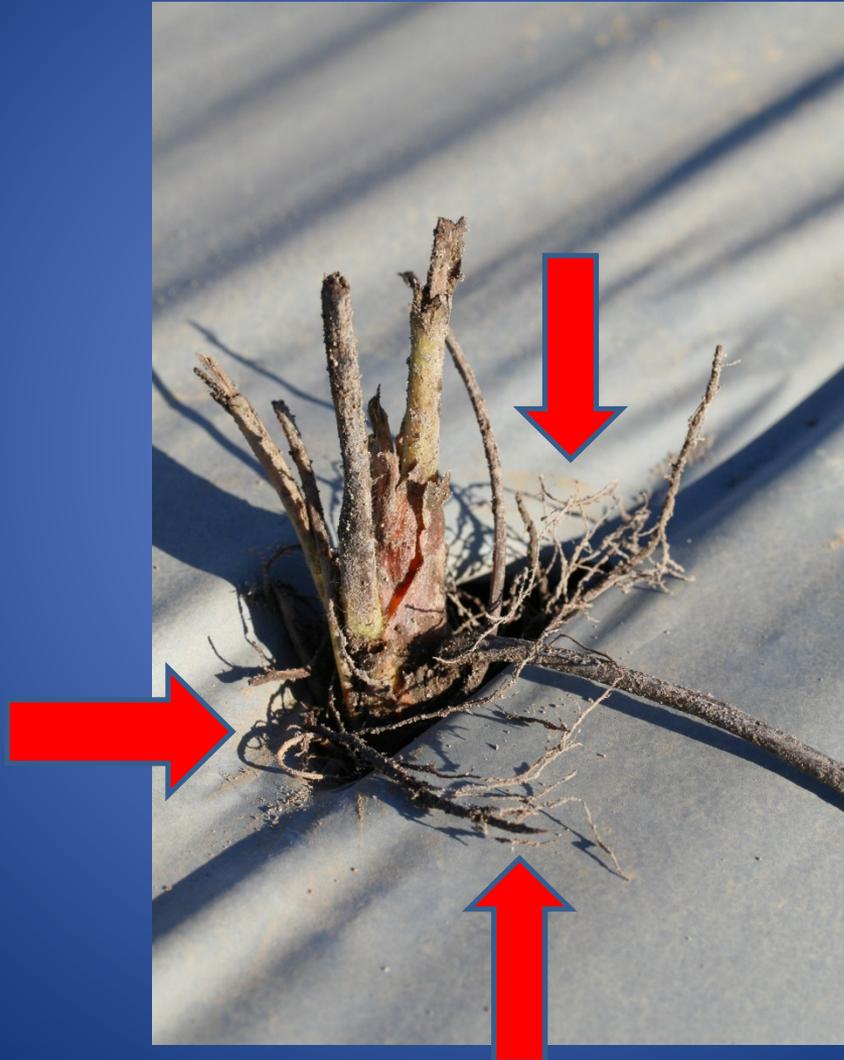
Correct position the plant in the ground.



“J- rooting”



“J”rooting

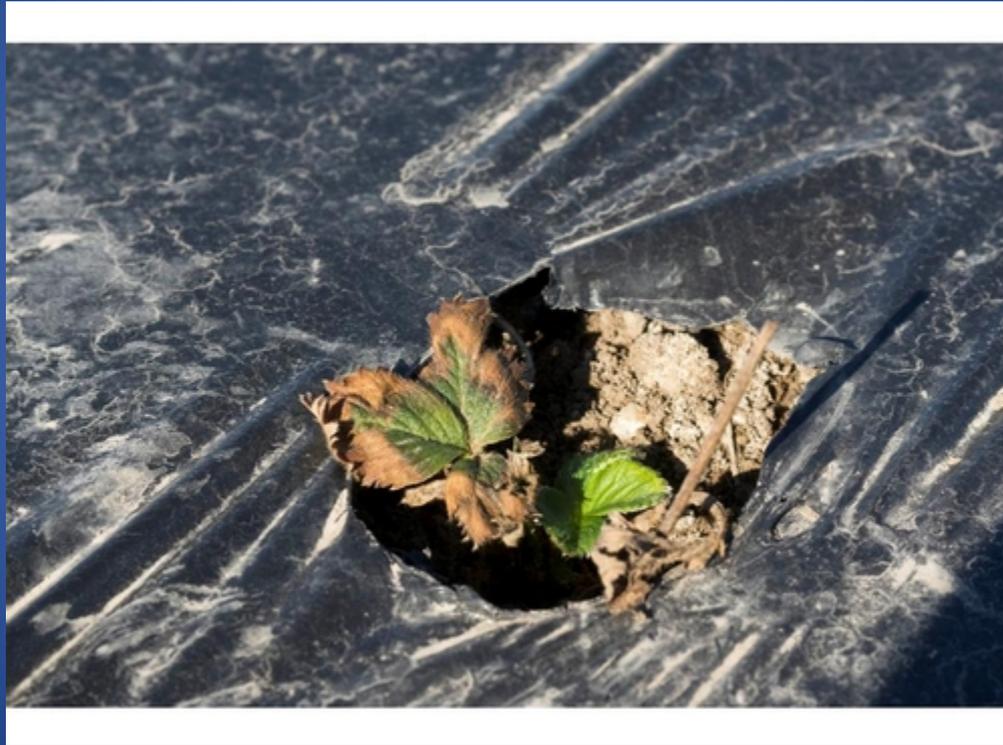


Current Salt Issue in Strawberries.





Current Salt Issue in Strawberries



Comparing No Irrigated with Irrigated

| | Nitrate (ppm) | EC (dS/m) |
|----------------|------------------|--------------|
| Sample 1: NO | 58 | 2.8 |
| Sample 2: NO | 72 | 4.2 |
| Sample 3 : NO | 69 | 3.8 |
| Sample 4 : YES | 24 | 2.2 |

Follow up to Field



A word about the use of composts.

- Beware of composts, blood and feather meals. Not only do you have pretty large amounts of nitrogen which mineralize (go to nitrate) faster than the poly coated preplant fertilizers, but these sorts of inputs can carry a lot sodium and chloride in them too.

Conclusión

