

## DID YOU KNOW...



# THE RASPBERRY

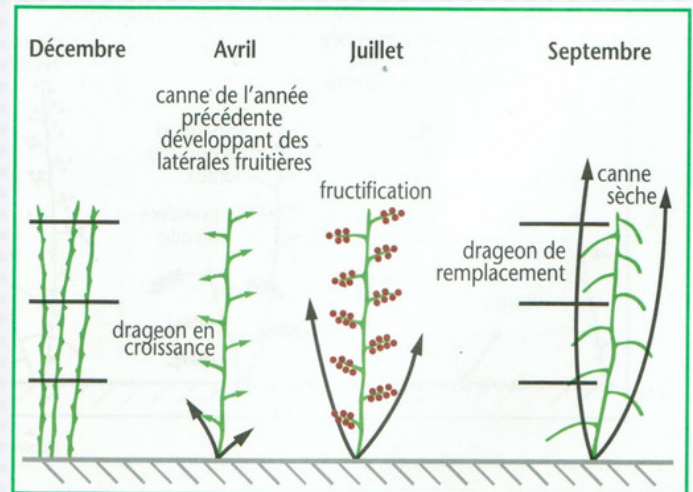
Coming from late 16<sup>th</sup> century, connected to a latin word *raspecia*, *raspeium* : meaning raspberry. There is also some connection with old french and german the word « rasp » mean a rough berry referring to the appearance.

Brambles from the mount Ida from greek mythology the raspberry get it's name from two mountain ridges one from Mysie near Troy and the other from Creta. It is described as a lower spreading bush with underground perennial parts. In fact the underground parts somehow rhizomatous, will emit annually semi-ligneous canes with or without spines.

# FLORICANES OR PRIMOCANES ?

## FLORICANE (SUMMER FRUITING)

Floricanes raspberries grow on a 2 years cycle. The first year will see a vegetative growth of the canes, flushing in the spring and slowing down late summer and getting dormant in September. Buds on this canes, located at the axil of the leaves, will differentiate in flowers and will fruit the following season. This will require enough cold to lift the dormancy by natural cold accumulation or artificial cold in a cooler. Canes that did produce the second year will die and dry out at the end of the second summer. At the same time, vegetative canes will grow and replace those last dried out canes. This will necessitate an annual pruning to move the dried out canes.

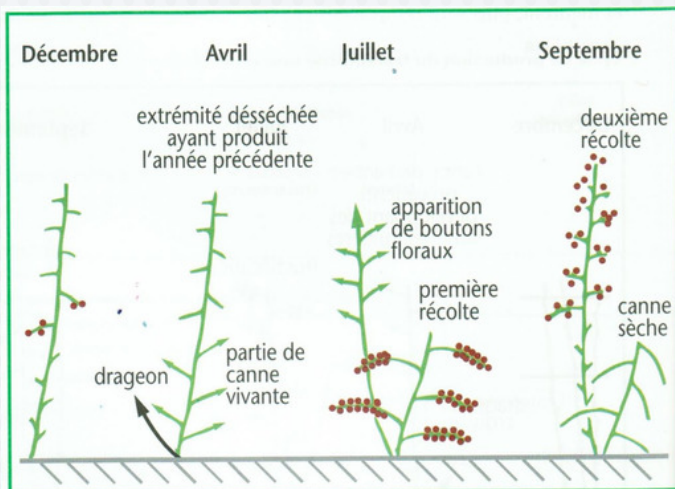


## PRIMOCANE (FALL FRUITING)

Primocane raspberry is also cycling on a two year period. The difference is that the vegetative buds will differentiate much really in flower buds and won't necessitate chilling and cold dormancy lift up to produce fruits. In fact, some of the florican varieties are summer fruiting varieties so late that do not have enough time to develop fruiting buds in our conditions. In the exceptional fall season, we commonly see the variety Nova or Prelude, develop a light crop in the fall.

That being said, primocanes variety will bear fruits on the first year growth from the top of the cane going down. This will permit an annual mowing of the all the canes. But it is also possible to double crop, by cutting late fall or early spring only the top part of the canes that did fruit.

The following spring the remaining buds will flower and produce a crop on the bottom of that same cane.





## RASPBERRY CULTURE TYPES

Raspberry is being cropped traditionally in open field. Florican varieties will need a trellising system to avoid cane damage loaded with fruits at harvest. It does facilitate maintenance at planting and during the vegetative growth period. Trellising is less critical for primocanes raspberry if they are mowed every year. Berries and canes are sensitive to weather aggression like rain and winds.

Sheltered culture, whether it's an umbrella type, un heated high-tunnel are gaining in popularity because of the protection to the wind and hard rains they offer. The reduction of cull fruit losses due to weather events and the ease of working under the tunnel explains most of it. Shelter cultures are compatible with soil culture or soils or substrate cultures. There is a lot of variation of methods and techniques to produce raspberries in soilless or substrate culture. Those cultural choices although comes with a high level of technical skills and money investments.



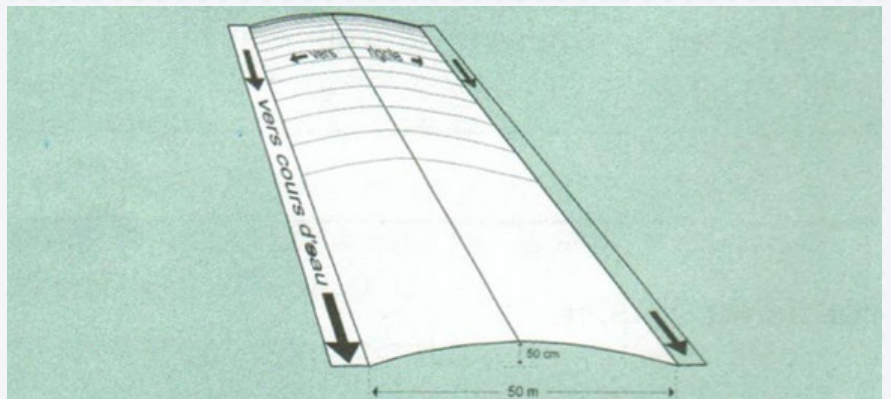


## RASPBERRY'S SELECTION AND SITE PREPERATION

A good productive raspberry patch is always in a well-drained soil. A high organic matter, the cool soil will be favorable. Heavy type soil with low drainage capacity will be unfavorable. If drainage is difficult, then it is recommended to plant on raised beds that are at least 35 cm higher than the centers of alleys. For all other considerations on site, preparation refers to the strawberry cultural methods.



All considered, Raspberry can be planted in the fall, tillage and cultivation before planting must be done in the middle of summer. Soil fertility corrections can be made at the same time. If needed, it is also time to prepare the hill structures of your plantings. middle row covers crop can sow in august when germination and growth are optimal.



Formation of 2% inclined boards facilitating flat surface drainage. If necessary, the ridge tillage through the board increases the surface drainage even more.



## RASPBERRY'S PLANTATION

For a spring plantation incorporates the needed fertilizer and prepare the ground as soon as possible. Site selection will be guided according to variety, cultural methods, and machinery specs. Normal plant spacing range from 40 to 60 cm on the row and 3 M between the rows. Planting in the higher density range will allow a more rapid establishment and an easier weed control. Do not plant back after raspberry as any other *Rubus* production, such as blackberry and black raspberry. We strongly recommend to us plants that have been produced under quality control protocols focused on systemic disease elimination and control, like viruses and phytophthora, as performed at Production Lareault for more than 60 years. We invite you to browse our web site or catalog to look at variety descriptions and comparative tables.



Upon plant, arrival keeps them in a refrigerated room at 2° to 4°C until planting time. When string the plants make sure they are planted deeper than the depth they were in the nursery before digging. You will notice a marking left by the dirt on the canes. This is especially relevant for fall planting where soil movements from winter freezing may uplift the plants. For home gardeners and hobbyist, we do not recommend anymore the use of plant starts fertilizers high in phosphorous for an ecological reason. We recommend adding organic base amendments well mixed with the ground with beneficial fungus and bacterial like Mychorhyzae.

One important factor to a successful plantation is to use dormant plants and to cut the cane back to ground level as soon as the planting is done. Hence the cane development won't be slowed down by fruiting buds growth on the upper part of the cane. This technic won't be as good if the plants are not dormant at planting.



## RASPBERRY'S MAINTENANCE

Ifrequent mechanical weeding is an effective way to eliminate weeds and ensure aeration of the ground. Later on, herbicide application will help maintained weed suppression for the harvest season.

A strict weeding strategy the first two years will insure the longevity of the raspberry patch. If you choose to sow the alleys, a regular mowing is needed to prevent grass invasion on the row.

For open ground alleys, a regular cultivation will be needed until a spring cereal is done in the middle of august. To complete the initial fertilization application, two nitrogen application will be done as a banded application.





## RASPBERRY'S HARVEST YEAR

In a case of a poor growth the first year it is more profitable to cut back the canes to the ground once more in the spring to hasten a more dense cane development. This will promote a better row development and at the same time will reduce weed invasion in the empty spots.

A better yield the third year will compensate largely the lack of revenue the second year. Early in the spring apply a residual herbicide, apply also a granular fertilizer adjusted to leaf and soil analysis results and recommendations. Supply irrigation to ensure 3 to 5 cm water input per week, this will become critical when fruit are enlarging right after fruit set.



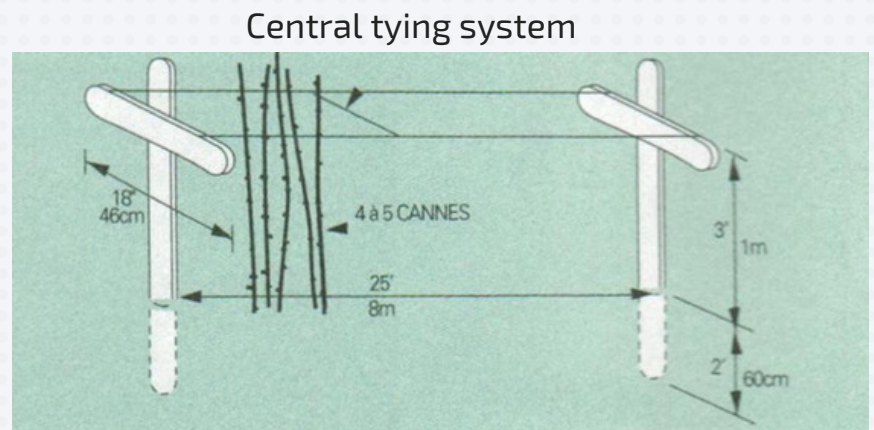
Water more often but with less duration in a sandy ground. Raspberry pruning is still a neglected subject. It is the most important factor to reach the best yields. The first goal of pruning is too thin the width of the rows and must be performed when the emerging canes reach a height of 15 to 20 cm and again a second time just before harvest.

The severity of thinning is guided by the ideal numbers of canes needed for a uniform yearly harvest. This canes density be 10 per row meter, the thinning is done consequently. Hence the pruning of the old canes after harvest will be facilitated. Canes that have been grown in a more sunny surrounding will be more healthy, with a larger size promising a sustain yielding.

## RASPBERRY'S PRUNING AND TRELLISING

Canes trellising is another way to keep constant good yields.

Overloaded fruiting canes will be supported vertically by wires (nylon or metal) to avoid them falling in the alleys. Those wires will retain the canes by wires stretched on each side of the rows. Different methods are available to perform such supports and are adapted to each grower needs.



Another method of summer fruiting raspberry production will use the trellising to alternate each side of the treillis with a vegetative side and fruiting side. Each side switching each year. This will allow opening the canopy to bring light in the middle of the row and facilitate canes pruning in the fall.

That method can be applied to the complete row and doing so, will be named biennial production. That is done by mowing to the ground the entire row after harvest and waiting another two years before harvest. The first year the row will grow vegetatively and will be thinned either mechanically or chemically.

Commercial growers will use contact herbicide to control row width during summer growth, as this can be done also mechanically. A cane pruning will be needed in the fall to keep a good cane density before fruiting.

This method suits well for U-pick operation, sinning it, helps disease controls, increase fruit size. One can see over a number of fruiting cycles a yield diminution of this growing method.