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On a recent trip to Chile, I took this photo in a raspberry production field. For me, it very neatly summed up the progress that has been made in raspberry breeding in the recent past. The variety on the left has been the industry standard type in the country for the last few decades. On the right is a newer cultivar that represents modern day genetics.



(Related story: [Four new raspberry varieties unveiled in Chile](#))

The global raspberry sector continues to grow, as it does with the other main berry types. Raspberries for fresh consumption have the biggest name in the marketplace, but processed berries are a major part of the berry industry. Further, there has been a recent increase in demand for frozen raspberries. Much of this is attributed to the increase in healthy eating

and drinking, particularly with smoothies and similar drinks.

There are some key differences in varietal requirements for fresh or processed raspberries. The immediate future for the processing industry has a strong focus on mechanized harvesting and although this is also being investigated for the fresh sector, it currently appears to be some years away from commercial fruition. Berry color is generally considered to be the main differentiator between processed and fresh raspberries. The processed raspberry normally needs to be a deeper red than its fresh counterpart. This means that manufactured products such as jams, yoghurt and juices have a more intense color.

Fresh raspberries on retailer shelves are often somewhat lighter in color for two main reasons. Modern day varieties are being selected with a naturally lighter color than traditional raspberries. As a result, they look like they will last longer once brought back home. Additionally, in order to extend shelf life, through the cool-chain, berries are often harvested slightly under ripe and therefore lighter in color. This means that they will be better able to withstand the logistics of arriving on the retailer shelves. Once picked, they then ripen during the transport process.

Many of the other main aspects of raspberry quality are similar between both fresh and processed sectors. Alongside color, berry size is one of the most apparent. In the past, both fresh and processed berries were much smaller than they are nowadays. It has been the fresh industry that has developed increased berry size more rapidly in the past two decades. As can be seen on the attached photograph, it is likely that the manufacturing sector will follow suit. The principal advantage of large berries is a reduction in harvesting and packing costs per kilo or tonne.

Other areas of berry constitution include the quality, size and cohesion of the drupelets. Both fresh and processing segments are looking for similar characteristics in this respect. Smaller drupelets tend to lead to berries that are more cohesive, meaning that both handling and appearance are improved through the supply chain. As both manual labor costs increase and the prospects of mechanical harvesting get more real, then ease of picking is more and more of an important trait that is considered when selecting new raspberry varieties.

For the very same reason, evenness of ripening is also has more of a focus than in the past. The current trend is for varieties that ripen over a shorter period, thus reducing harvesting cost per kilo, whether carried out by hand or by machine. In the past, a longer harvesting window was often preferred as it lengthened the hard natural season of supply. These days,

with modern growing systems, raspberry producers can use plant manipulation techniques, such as protected cropping and staggered plantings of long canes to lengthen the season, but keeping picking costs under control period

Raspberry flavor continues to be a big debate within the berry industry. Historically, raspberries were characterized by their acidic nature. Whereas we are seeing a significant surge in sweetness across the overall berry sector, many people still prefer their raspberries to have a balance of sweetness and acidity. As a result, modern breeding has led to the development of sweeter berries, but there is often still a contrast in flavor with varieties that still have that “bite”.

In conclusion, as we observe the future development of the raspberry industry in the coming years, we expect to see the processing side following fresh with larger individual plantations, using more modern varieties. Likewise, we anticipate seeing a significant increase in mechanized harvesting in the short term in the process side, with fresh production following in its footsteps. At GPG, we will continue our work to bring improved raspberry varieties to growers in both sectors across the world