### PLANT BREEDING

### **INTERVIEW**

—Steve Nelson, Plant Sciences



# Bedding in for European expansion

watsonville—Californian soft fruit breeding specialist Plant Sciences

has put down new roots in Europe as it looks to meet demand

for new berry flavours and better shelf-life.

by Mike Knowles - Editor, Eurofruit

alifornia-based berry breeder Plant Sciences is aiming to grow further in Europe following the launch of its new subsidiary, Plant Sciences Europe. The company has been active in the European market for many years. But with various breeding programmes in the region sowing the seeds of new opportunity for the group, it has opted to establish a new home in the Netherlands, a base from which it will run various programmes offering new varieties, improved flavours and extended shelf-life. Here, Eurofruit speaks to the group's president and chief executive Steve Nelson about its current and future plans.

## What does the opening of Plant Sciences Europe entail for your business?

**Steve Nelson:** While we have long served the European continent from the States, our intention is to move closer to the market and to our customers. The establishment of Plant Sciences Europe BV, under the management direction of Daniel de Vogel, will enable us to respond more effectively to opportunities and challenges in the European marketplace.

# You appear to be placing a lot of emphasis on so-called 'open market' breeding here in Europe. What advantages does this offer?

**SN:** Historically, our small fruit genetics (specifically varieties) have been under limited licensing arrangements – either with individual grower-shippers or a club of grower-shippers who had a vision for an exclusive product – at a somewhat higher associated cost. While this model continues to perform well, we have decided to structure our business such that we can offer our varieties to the largest audience possible at the most competitive price. Given the price pressures that producers, marketers and retailers are under, we sense that such an approach is needed to remain most viable going forward and bring new varieties forward to the broadest market.





# Could this open model disrupt the club approach you have used in the last 20 years?

**SN:** We expect these models to be complementary. Existing clubs will remain in place and those that are part of our club model will also have full access to a growing portfolio of premium varieties at open market licensing and royalty rates.

# Where do you see these open programmes leading?

**SN:** We envision that we will be able to offer numerous, competitive varieties of all small fruit categories to an ever-growing group of grower partners worldwide. Plant Sciences established the 'club partner' model for berry varieties globally over 20 years ago. As we go forward, however, we perceive that this model has a shelf-life. There is a distinct need for competitive varieties that can be offered at competitive rates and be accessible to the broadest possible market.

# Which berries are being developed as part of this new model?

**SN:** We have crossing programs both in the US and Europe, and we screen selections and advanced selections in most major berryproducing countries. Strawberry, raspberry and blackberry variet-

ABOVE—A broad range of colour variation in raspberry varieties
BELOW LEFT—Plant Sciences is a major breeder of new strawberry varieties
OPPOSITE TOP—Cultivars are bred to offer new consumer experiences
OPPOSITE MIDDLE—Ensuring year-round quality is a key requirement
OPPOSITE BOTTOM—Plant Sciences is pursuing a new, open-market strategy

ies are being screened throughout Europe now, and we expect to begin testing black raspberry and blueberry selections soon.

# What are the most recent additions to your breeding programmes?

**SN:** We initiated a robust blueberry breeding program in 2012, and most recently we have added a northern short-day strawberry breeding programme,to develop short-day genetics that are properly adapted for markets traditionally dependent on Elsanta-type varieties. This will provide alternatives to the traditional Elsanta markets. Our first introductions to northern Europe were ever-bearing varieties (Promise, Valor, Premier, Triumph and, more recently, Prize, Majesty, and Arabella), which complement the traditional northern European short-day varieties. It is difficult to match the early season productivity of a northern short-day variety with an ever-bearer; we therefore believe a percentage of the acreage



will always be dedicated to northern short-day varieties. Additionally, we perceive that European growers have not been afforded adequate numbers of competitive alternatives to legacy varieties such as Elsanta.

You've said in the past that Arabella is taking hold as a leading contender in northern Europe. Why is it proving so successful?

**SN:** Arabella is our most recent ever-bearing strawberry release and it's being grown both in California and Northern Europe. Flavour is its primary competitive advantage: it consistently offers a superior flavour experience throughout the season. It was initially identified as a leading selection in the UK and Holland, where it tends to produce a medium-sized, lighter-coloured berry more aligned to northern European expectations, while offering a delightful flavour that has customers asking for more. The fact that Arabella is an ever-bearer gives us the opportunity to bring it to the market nearly year-round. We and our customers are actively looking to capitalise on the strengths it offers.

How seriously should we be taking the emergence of a new market for black raspberries?

SN: Black raspberries are well documented to be the berry that offers the highest antioxidant reward. As such, black raspberries could be considered the super-superfood. Limitations on producing and marketing this berry in the fresh category have historically been a lack of size and lack of firmness. Here at Plant Sciences, we have been breeding black raspberries for more than 10 years, striving to enhance berry size and firmness. We now have floricane selections that produce black raspberries of comparable size and firmness to the traditional red raspberry. Our goal over the next three to five years is to develop a primocane version of the same, which will begin to open up yearround supply options.

What point of difference can black raspberries offer that other berries (including traditional raspberries) cannot?

**SN:** Black raspberries offer a distinct flavour experience, a uniquely enjoyable texture, and exceptional health benefits. Black raspberries are not 'just another raspberry', but truly a new product. Consider blackberries: people often have a good blackberry eating experience in the back of their mind, but to consistently repeat that experience, while not impossible, is a bit difficult. Black raspberries, on the other hand, have the ability to offer a more consistently enjoyable eating experience.

More generally, in the coming years, what trends do you see shaping the berry business in Europe and around the world?

**SN:** I think there will be a continued emphasis on flavour, freshness and productivity. Older varieties will be replaced by more competi-

tive ones that offer consistent performance rewards for growers, retailers and consumers alike. I also believe there will be a further focus on substrate growing in an effort to avoid the negative impact of soil pathogens. Additionally, demand for organics will continue to grow. Producing berries closer to regional markets will continue to be important, as will better and more effective use of technology. Plant breeders will look to fully leverage the advantages of genomic selection and other related technologies in an effort to provide berry varieties with improved flavour, freshness and productivity. Continued strains on resources – in particular a shortage of labour – will continue to drive technology and innovation towards new varieties, growing systems and mechanised harvesting.

Despite the many challenges associated with growing and marketing berries, we remain highly motivated by the fact that the berry business attracts some of the most motivated, innovative and creative people. Plant Sciences has benefited from working closely with global berry leaders for more than 30 years. We look forward to expanding our influence in Europe!



