

# CUTTING Edge

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## Closing the Gaps!



*The Cutting Edge is a regular article written by Dr Jonathan Cutting for the New Zealand avocado industry magazine, AvoScene.*

The avocado industry faces challenges in addressing grower skills. It's not so much that there are no grower skills because there are, but these skills are captured by relatively few growers. Rather it's a case that there are now significant gaps in grower knowledge and skills – a have and have not situation. The difference between regions is even more apparent. A recent evaluation of pack data from the different regions showed a disturbing trend – a trend that impacts directly on grower profitability. The difference in both fruit sizes and export pack outs between the Bay of Plenty, Far North and Whangarei regions was sobering. The pack size data for the period September to November for USA packaging and the Class data for the season to date are presented in the tables below.

Count sizes	Bay of Plenty	Far North	Whangarei
% 16/18	10	4	1
% 20	19	22	7
% 24	46	61	41
% 30	25	13	51

Fruit Class	Bay of Plenty	Far North	Whangarei
% Export class 1	70	51	60
% Export class 2	5	3	6
% Local market	25	46	34

*Note: all data rounded to the nearest percent.*

Obviously there are reasons for this difference and some causes are regionally specific such as climate, soils and the pest spectrum. In addition there are commercial advantages that arise from early fruit maturity and the bias of the Far North for example to capitalize on this opportunity slants this district's figures towards an apparently stronger local market bias.

The figures are also influenced by some regionally specific one-off incidences such as the outbreak of six-spotted mite in Whangarei. In evaluating the data I am certain that the numbers are accurate and do not lie. For the first time we have a database that can assist the industry leaders in identifying regional differences using a strong statistical approach and as such they become informed and can respond accordingly.

However my concern is something more telling and fundamental and goes to the variable or "human" component of regional difference. It is this component that I wish to explore in this "Cutting Edge"

There is no doubt that yields are a bit lower in the mid north when compared to the Bay of Plenty. Peter Lyford presented data at the May 1999 strategy meeting that showed that BOP yields were approximately 12 tons per ha while mid north yields were between 6 and 7 tons per ha. We do not have complete data for the Far North but we do know that there are growers there who consistently crop at above 25 tons per ha. So what does this all mean and how can we use this information to add value to the New Zealand avocado industry. To me it says that mid north growers are less profitable than growers in the Bay of Plenty or Far North based on returns per ha.

Is it the overall grower skill base in the mid north? It is hard to pin point the reason. What we do know is that it is a new production area. This is more clearly understood if one considers that just 8 years ago the district was exporting less than 10,000 trays. However, this year the mid north will export approximately 230,000 tray equivalents. This means that the district carries forward very little historical production knowledge. There is, in addition, a less entrenched horticultural culture in this district when compared to say, the Bay of Plenty, with a larger number of older avocado orchards and of course being the largest of the kiwifruit production centers.

New entrants into the avocado industry are usually not horticulture trained or experienced. This trend obviously affects all districts but would impact more in Whangarei due to the much smaller grower base and the rapid expansion of the local industry over the past 5 or so years. There are only approximately 90 growers in Whangarei versus over 500 in the Bay of Plenty. The avocado industry nationally is going through a period of sustained growth and a good percentage of this growth is in the Whangarei – mid north region.

I also am concerned at the motivation for new grower entry into the avocado industry. It does appear that many new entrants are motivated by the belief that it

is easy to grow avocados and that really it is as simple as picking money off trees – well it is not! That is real estate talk. It takes 6-8 years to break even, there are big differences in individual property performances (just look at comparative property yield data) and more importantly all the good growers are skilled and experienced and love growing avocados. They have learned the old fashioned iterative way. There is nothing as educational and focusing as two or three bad years. I have no doubt that somewhere in the next decade there will be a strong period of education and focusing.

I would like to explore climate and soils but that is an entire **“Cutting Edge”** on its own. However in simple terms we do know that the BOP has more sun shine hours, less rainfall and has deeper pumice based soils. We have not quantified and therefore do not really know how much advantage this gives growers in KatiKati, Tauranga and Te Puna. We do however know that soils are not everything. Consider for example the Far North. The sandy free-draining soils that most avocados are grown on would not be considered “fertile” even when stretching the truth. However this district has some of the highest yields and largest fruit in New Zealand.

The skill base of growers and the lack of a “Best Practice” approach are two issues that I believe are very important. I also believe that we, as an industry, also need to better manage opinion, particularly uninformed opinion. To me it is astounding the number of “experts” in the business of providing opinions as to the production of avocados. In many cases this comes off an unskilled, uneducated and inexperience base. Growing avocados is not easy. There is a real reason why most of the world avocado industries are in first world countries or if not in first world countries then at least are first world industries such as the USA, Israel, Australia, South Africa, Spain, Chile and New Zealand. Mexico is the exception but we should not forget that it is the origin of the avocado and there is a

huge domestic market. Most of the industries listed above are also well supported by a creative and vibrant research and technical base.

As I stated earlier “growing avocados is not easy”. There are some peculiar attributes and issues, such as *Phytophthora cinnamomi* root rot, nutrition requirements, flowering and pollination, carbohydrate storage and use, rootstock and scion combinations, spacing and canopy management and the most unusual avocado tree phenology. It also has very specific climatic requirements. In addition we are required as growers to grow large fruit that are blemish free if we are to be rewarded appropriately. All this takes skill and experience. Having grown “veggies” or other fruit trees is no qualification. Unfortunately growers end up becoming confused as they are exposed to apparently conflicting views, opinions and advice. Quite a large amount of the conflicting opinion and advice is philosophically driven and not based on sound numbers, a thorough statistical approach, a robust science process and good interpretation of empirical data. In the case of avocados (and maybe other things!) “a little knowledge is a very dangerous thing”. I say this because of our reliance on empirical data (data generated under controlled and known conditions in a specific experiment), which can be very difficult to interpret in such a way that it can be used profitably in a production environment and system.

Another concern is the rather simple approach of “*one shoe fits all*” in our management of orchards, in particular our production inputs. This is perhaps the single greatest flaw in the Grower Manual, which unfortunately does not focus strongly on regional production differences and needs. We desperately require “best practice” from a production perspective. However this should not be New Zealand wide – rather it should focus on the regional issues. However, there are lessons to be learned from all regions and an element of co-ordination and strong guidance is essential. Probably the most

important attribute and strength we have in New Zealand is the fact that some growers are enormously experienced (they have been at it a long time) and do it well, every year! We need to learn from these people but we also need to identify them.

The AGA is aware of this gap in skills and knowledge. It is determined to do something to address the situation. To achieve a successful outcome it needs a vehicle to skill under performing growers who wish to do better and consultants who want to provide better service to clients, but this vehicle also needs to be consultative, supportive and embracing. The industry goal is to achieve an industry average yield of 15 tons per ha from mature orchard and increase average export pack out to above 75%. There is also a need to reduce outturn failure in all export markets to less than 3% per year. It is a big goal but important for long-term grower profitability.

Recently an application was made to the Sustainable Farming Fund to set up Regional Focus Groups to identify regional issues and develop regional “Best Practice”. The AGA was successful and received support for this programme. The value of the grant is \$100,000 per year for three years. This programme is a partnership between Government, the AGA, growers and consultants. The Regional Focus Groups are the “core” and “heart” of this programme. I would encourage as many growers as possible to participate in the programme, which will be launched in the next two months in all the major production regions. By doing so you will contribute toward the development of “Regional Best Practice” which will benefit all avocado growers. The future is still about being smarter than the competition.