



NZ HOPS - DATA SHEET

"hops with a difference"

PACIFIC GEM

Breeding: A Triploid Alpha type bred from the New Zealand variety "Smoothcone" crossed with Californian Late Cluster x Fuggle. Developed through the hop breeding programme of the New Zealand Horticultural Research Centre known now as HortResearch and released in 1987.

Selection: Does not carry the punchy aromas usually associated with higher Alpha hops. Pacific Gem contains a good balance of oils which constantly contributes to its aroma score. A very pleasing hop with useful bittering potential with Alpha Acids at 13 % and above.

Brewer's notes: Pacific Gem fills the brew house with enticing aromas during kettle addition and has been described as producing oaken flavours with a distinct blackberry aroma. Typically used as a first hop addition and makes its presence felt through an excellent tempered bitterness and flavour. Well suited to a wide range of beer styles and lends itself well to European Lager styles of various bitterness levels.

"A master of consistency"

Grower comments:	Maturity	Mid season
	Yield	Moderate to high
	Growth Habit	Vigorous, clavate frame
	Cone Structure	Long, compact, ovate shape
	Disease Resistance	Not defined as New Zealand is hop disease free
	Storage Stability	Good

Technical data: HPLC and Oil Composition (Measured within 6 months of harvest, stored at 0 °C)

Alpha Acids	13 - 15 %
Beta Acids	7 - 9 %
Cohumulone	37 - 40 % of Alpha Acids
Total Oil	1.2 mls oil per 100 gram cone weight
Concentration	78 uL Oil/gram Alpha
Myrcene	33.3 %
Humulene	29.9 %
Caryophyllene	11.0 %
Farnasene	0.3 %
Citrus-Piney Fraction	9.4 %
Floral Estery Fraction	1.8 % (Linalool 1.0 %)
Xanthohumol	0.6 %
Other	11.6 %

Applications: Sought internationally for its ability to deliver consistent alpha much of the crop is transformed by supercritical CO₂ to resin. This creates a reliable off-season source of kettle extract for the northern hemisphere brewer.