

COLD PRESSED AVOCADO OIL – PRE AND POSTHARVEST FACTORS THAT INFLUENCE QUALITY

C.Requejo-Jackman¹, S.Olsson¹, T.McGhie¹, L.Eyres³, O.Ashton², Y.Wang², M.Wong², A.Woolf¹ and G. Throp⁴

¹ HortResearch, Mt Albert Research Centre, Private Bag 92 169, Mt Albert, New Zealand. Email: CRequejo-Jackman@HortResearch.co.nz

² Institute of Food, Nutrition & Human Health, Massey University, Privt Bag102-904, Auckland, NZ

³ Oils and Fats Specialist Group, NZIC, PO Box 25499, St Heliers, Auckland, New Zealand

⁴ HortResearch 120 Mt Albert Rd. Auckland New Zealand Email:gthorp@hortresearch.co.nz

Cold pressed avocado oil is relatively-new in the commercial culinary oil field. Prior to this development, avocado oils available were only extracted using organic solvents and/or heat along with refining, bleaching and deodorising steps resulting in a clear oil with good stability, but little taste, and thus reduced health benefits. Cold pressed avocado oil has started to be appreciated as unique oil for its culinary and human health properties.

It has become clear that aside from the relatively healthy nature of the fatty acids in avocado oil (high in mono-unsaturates – similar to olive oil), there are a range of other components which are considered healthful. These are the tocopherols, phytosterols (including β -sitosterol), and a range of fat-soluble pigments in cold-pressed oil such as chlorophyll, carotenes and xanthophylls including lutein.

We have examined a wide range of factors which may influence the levels of these components including preharvest (such as maturity, growing environment, and cultivar), postharvest (storage duration and ripening), processing conditions, and shelf life conditions and duration. We will highlight the relative importance of these issues.