

# Exploring the potential of new essential oil crops

Before investing resources and committing your energy to growing a new crop there are some key questions to explore. This checklist will assist prospective growers to assess the product they are interested in growing from a marketing perspective, identify the resources and skills needed to successfully grow and market the product, and target the skills needed to make a success of the venture

## The product

1. What do you want to produce? Essential oil, food product, perfume product, toiletries, craft products, other.
2. Where is your market? Local craft/individual New Zealand user, New Zealand wholesale, New Zealand retail, overseas, spot market, individual user, broker, other.
3. How much product do you need to satisfy your market and what is the minimum amount traded as a unit?
4. Who are the potential buyers in your market?
5. What are the specifications of the product defined by your market and by your identified potential buyers?
6. What is the cost structure for your production system - including items in Resources (6)?
7. How does the market price your product?
8. What processing is needed to get the product into the form preferred by your market?
9. How should the product be packaged?
10. What regulations are relevant to your product - New Zealand or overseas, trade tariffs, quotas, duties etc., health or food product safety regulations?

With these questions answered, you should be able to define the scale and detail of your production process. The next major question is - What do you need so that you can supply the market with what it wants when and where it wants it?

## Resources

1. Land? Free draining, especially in winter. Preferably northern aspect, natural or artificial shelter from wind. Reliable spring, summer sunshine hours. Reliable water - rain, irrigation through main growth period. Good access to location of still.
2. Plant material? For major markets this must be reliably identifiable as the cultivar, clone, line recognised and accepted by the market, buyer. Random selection from local material can be risky. Particular analyses may have to be done to check the suitability of some plant material for your intended end use - this step is essential for overseas markets.
3. Harvesting equipment? Depends on scale - hand shears/mechanised hand-held hedge trimmer, small cultivator-mounted cutter, small or full farm-scale tractor, windrower, silage cutter and trailer-mounted tub.
4. Extraction equipment if your intended product is an essential oil? Assume steam distillation. Steam generator, pressure cooker, pilot scale (stillpot up to 1 m diameter for up to 1.5 m deep, commercial scale tubs (2 x 3 x 4 m or bigger), condenser, separator, storage vessels.
5. Labour? Agronomic, extraction, packaging and distribution.
6. Finance? Capital and running costs of trial plot establishment, sample preparation, market research and travel, expansion to full-scale production, expert advice, packaging and distribution development capital, etc. Some essential oils have lead times of three to four years before coming into full production.

## Skills

You will need these skills - yours or employed - to ensure that the production system supplies what is required reliably and reproducibly.

1. Growing plant material? Agricultural, horticultural knowledge and experience, crop establishment, irrigation, fertilisers, weed and pest control.
2. Ability to recognise stages of plant development and the correct harvest time.
3. Good sense of taste, smell to evaluate oils.
4. Mechanical, plumbing skills for construction and operation of harvesting and extraction equipment.
5. Marketing, promotional and selling skills.
6. Packaging artwork and materials.

## 'Professional' expertise

Do you have adequate expertise in the following areas? If not, do you have contacts who do or do you know where to find it?

1. Market research?
2. Marketing and selling your product?
3. Financial analysis and planning?
4. Finding development capital?
5. Defining specifications for your product?
6. Sample preparation and packaging?
7. Identifying and obtaining the correct plant material?
8. Agricultural, horticultural know-how?
9. Getting your harvest, extraction right to produce product, quality oil?
10. Analysis and quality assurance for your product?
11. Engineering and construction skills to establish and run the harvesting and extraction.

## Contacts

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