

Australian Olive Association Conference

Zero Waste Hub for Olive Growing



October 2023

Olive Pomace

Building Australia's first zero-waste hub for olive growers

Project **Australia's first zero-waste hub for olive growers**

Contribution **\$500,000**

Completion **October 2023**

Information **www.cebic.vic.gov.au**

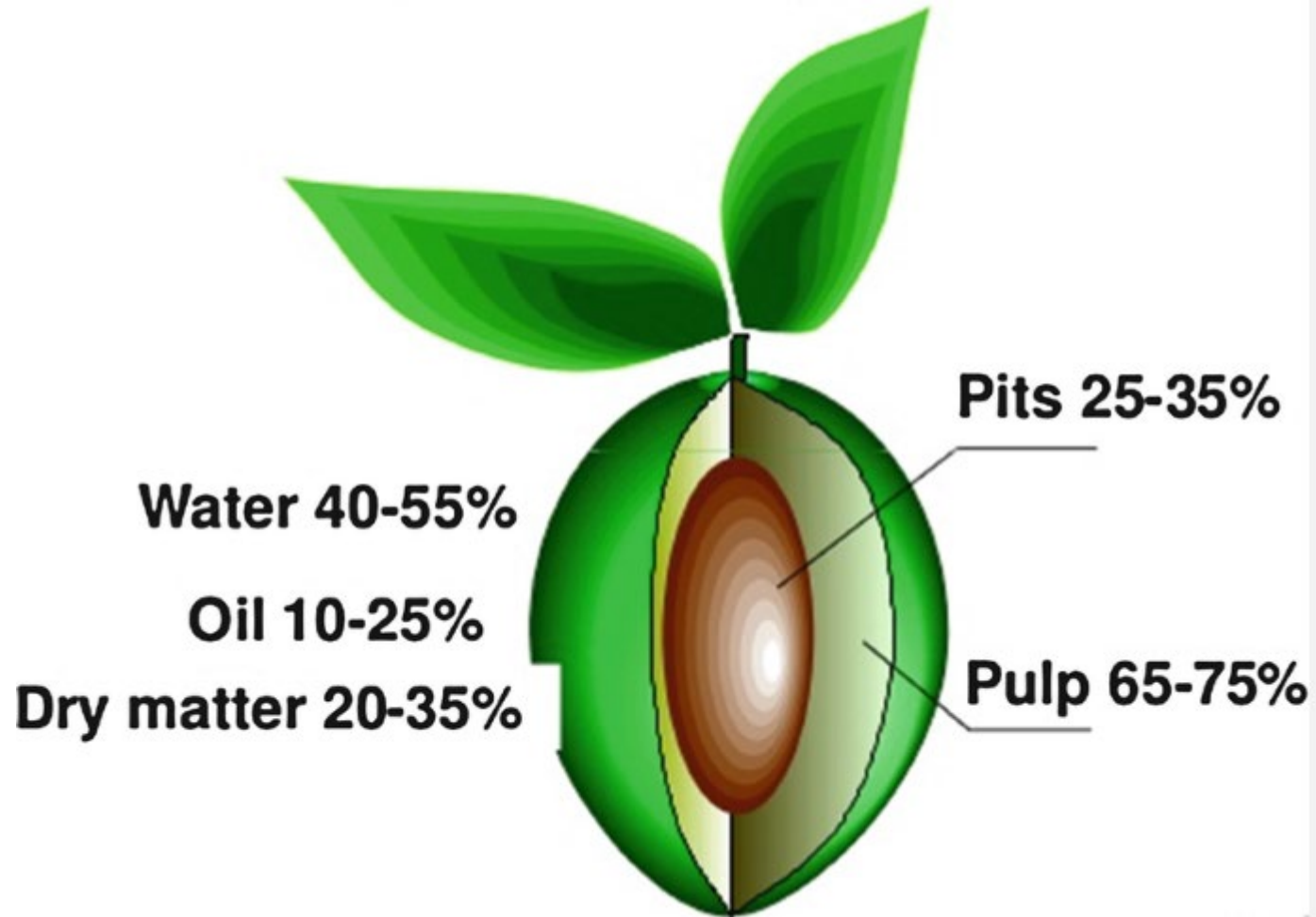
Boundary Bend Olives seeks to revolutionise the handling of olive 'by-product' in modern olive processing by building a specialised facility that can process tonnes of olive pomace each year into valuable new products, such as animal feed and fertiliser. This innovative project will reduce organic waste and deliver significant greenhouse gas reductions.

Authorised by Sustainability Victoria, Level 12, 321 Exhibition Street, Melbourne Victoria 3000.

Olive Pomace



Olive Fruit Composition

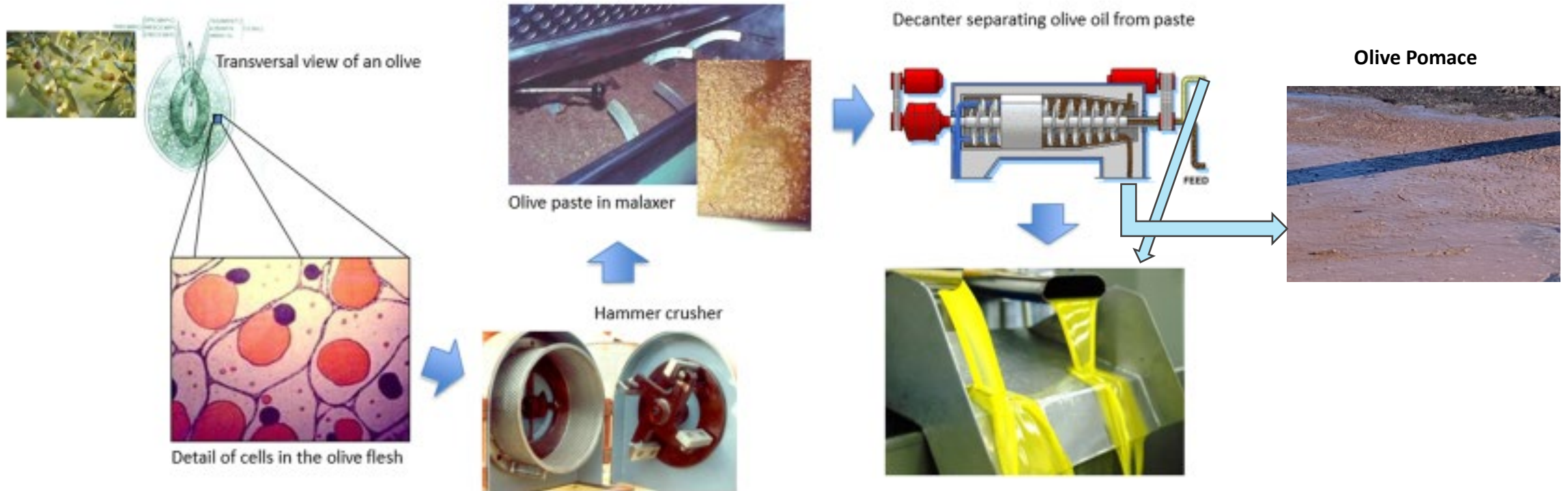


Process

Production of Extra Virgin Olive Oil



Extra Virgin Olive oil is the highest quality oil obtained solely from the fruit of the olive tree (*Olea europaea* L.) by mechanical means.



Olive Pomace

Two Phase Olive Pomace Composition

70% Moisture

15% Olive Pit

15% Olive Flesh, Skin etc.

Generally, the two-phase olive pomace (TPOP) is composed of:

Water (60–70%), lignin (13–15%), cellulose and hemicellulose (18–20%), oil (2–3%) and ash mineral (2.5%), along with other organic compounds (3–4%), such as sugars, poly-alcohols, volatile fatty acids



Olive Pomace Challenges & Opportunities

It is common practice around the world to naturally dry the pomace in evaporation ponds and then use as a biofuel or spread back on the grove or paddock.

Some Challenges:

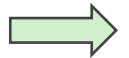
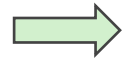
- Slow – Takes 9 months to reduce moisture content
- Cost money to excavate, wind row and turn
- The natural fermentation and breakdown of the pomace reduces quality
- From an environmental perspective there are better options – Fermentation and Odour
- Very difficult to handle and store
- Opportunity to improve process
- Produce a higher quality product in a stable state

Olive Pomace

Objective: To reduce the moisture content of the pomace, limit the natural breakdown and degradation of the pomace, reduce odour, enable handling and storage, and achieve a better environmental outcome.



Olive Pomace Drying



Olive Pomace



Olive Pomace Value Add

