



David Jochinke in a paddock of safflower he planted last year.

PHOTO: Alistair Lawson, AgCommunicators

Safflower is not considered a staple crop by most growers in Victoria's Wimmera in the same vein as cereals, pulses and canola, but for David Jochinke the crop presents some exciting opportunities given the right agronomy package.

David is a third-generation farmer at Murra Warra and has a family history of growing safflower.

“My father used to grow it as an ‘end of rotation’ crop, meaning it was the last crop in the rotation before a fallow or pasture phase,” he says.

Snapshot

Growers: David and Simone Jochinke

Location: Murra Warra, Victoria

Average annual rainfall: 420 millimetres

Enterprises: cropping, livestock

Crops grown: wheat, barley, lentils, chickpeas, faba beans, oaten hay, canola, safflower

Livestock: trade lambs

“I became more interested in safflower in the late 1990s when I returned home to the farm and studied for my Bachelor of Agriculture part-time at Longerenong Agricultural College. It was there that I met Dr Nick Wachsmann, who was studying for his PhD.

“I got to learn more about safflower itself including different varieties, best practice agronomy and some of the marketing opportunities it presented.”

David doesn't grow safflower every year. The last time he grew it before the 2016 season was in 2011. Instead, his decision to grow it hinges on several factors in the early part of the winter growing season.

Among these trigger points is, first and foremost, moisture. “Safflower is a thirsty crop and, in my experience, it needs at least 200 millimetres of rainfall and soil moisture combined before it starts to produce any significant yield,” David says.

“Having said that, safflower does have an aggressive root system, which can scavenge down and draw out moisture from deep in the profile while also helping to ameliorate the subsoil.

“Seed availability and paddock history are also important to consider before growing safflower. Imidazoline residues can stunt early growth of safflower and Group I chemistry can also knock the crop around.”

Critically, having a market for safflower is also an important consideration. “In terms of growing it as an oilseed versus a birdseed, the birdseed market is a very volatile market whereas the oilseed market is a lot more stable,” he says.

“There is less upside in the oilseed market and it trends very closely to canola. With birdseed, in one year you might have to store it and in the next year you'll want to sell it straight off the header. It generally trades anywhere between \$300 per tonne up to \$900/t for birdseed, but it is not uncommon to have to store it for an extended period until you can get a reasonable price.

“The longest we have had to store safflower was just less than two years. The one thing I would recommend to those intending to grow safflower is to make sure you have some kind of on-farm storage so you can store it safely if you need to.”

Decision trigger

David's decision to sow safflower in 2016 was not made until towards the end of his winter crop planting program in late May.

“We had almost finished sowing our winter crops and the paddock I eventually sowed safflower in was originally earmarked for a cereal,” David says.

“I saw canola prices kick, but I didn't have any canola in and at that point it was too late to sow canola to achieve a reasonable yield.

“I decided that I wanted an oilseed and so sowed safflower.”



Safflower ready for harvest on David Jochinke's farm in Victoria.

PHOTO: Alistair Lawson, AgCommunicators

In the middle of June, David planted 80 hectares of the safflower variety S317, an oleic variety he had not grown previously. The crop was sown at a rate of 20 kilograms per hectare on 30-centimetre row spacings – the same spacing as the rest of David's crops – with 40 units of nitrogen up-front.

David says sowing the crop early rather than later in spring is ideal if growing it as a cash crop.

“Sowing it early gives it a chance to establish well and you can provide the right nutrition in order to make good yields,” he says.

“It can also be grown as a strategic crop to soak up moisture or help tidy up a weed problem, or as an opportunity crop where things might go wrong with your normal winter program, such as an establishment failure with cereals.”

An above-average rainfall year – with the farm’s 420mm average exceeded by 110mm – helped push the crop along. Mild conditions in the safflower’s early growth stage saw it establish well early. An early spray for redlegged earth mite was the only insect control used.

Safflower harvest started in February, not long after the harvest for other winter crops finished, with David aiming for yields of two tonnes per hectare. “We averaged about 1.6t/ha, which I think came down to sowing rate,” David says.

“We sowed the safflower at 20kg/ha but in hindsight with the wet conditions we had we probably could have dropped that back to 15kg/ha. We would normally sow it at 18kg/ha but because we got a good strike on weeds early and there was minimal insect pressure, the crop got going well and was probably too overpopulated.”

Returns were favourable, with David selling most of the crop for just under \$500/t straight off the header as oilseeds. Gross margins also were generally good, with the crop costing between \$400 to \$450/ha to grow, including all inputs and overheads.

David sees tremendous opportunity for the crop, with CSIRO issuing a licence to GO Resources to commercialise genetically modified safflower technology to produce super-high oleic safflower oil for the high-value industrial oil market.

“For me, that could be the future of safflower – specialised oil production with varieties designed for a slightly drier climate,” David says.

“I would only be prepared to grow safflower on a yearly basis if there was a stable market for it.

The industry is starting to look that way but we have seen plenty of players come and go over the years.

“We need a stable player in the market to ensure growers get a good price and are paid for what they produce.”