



HOME
GROWN

PEPPER PIONEERS //

Something exciting is happening in the mountains about 25 kilometres east of Launceston. There, Andrew and Sharon Rath are cultivating Tasmanian Mountain Pepper, a native Australian pepper with flavours and aromas all of their own. Andrew told *Baking Business* how it's all going.

WHAT BROUGHT YOU TO BRONZEWING FARM?

My wife Sharon and I had a long-standing desire to cultivate select Australian native food plants. Our initial thought was out in the semi-arid zone where a lot of bush tucker is collected but, with climate change potentially bringing serious shifts in rainfall, we decided a wetter area may be a cleverer idea. Tasmania is rapidly gaining a reputation for quality, niche foods, wines, spirits and agriculture in general and, given that we'd lived in Hobart for a while in the 1980s, a move seemed obvious.

HOW LONG HAVE YOU RUN THE PROPERTY?

Bronzewing Farm was established in the 1870s. We purchased it in 2008 in what I like to describe as a wonderfully rundown state. Everything was in equal need of renovation—the fences, sheds, house, pastures, dams. We have restored the farm to a highly productive state, but also introduced practices to ensure the maintenance of the soil and water quality. It must be working, as I have filmed platypus swimming in our farm dams every year now for the past four years.

HOW DO YOU APPLY YOUR EXPERTISE AT THE FARM?

I have a doctorate in agriculture and spent most of my time, prior to going full-time farming, undertaking research for an American agricultural biotech company. I am now a full-time farmer, but I can't get away from the research: most Tasmanian Mountain Pepper is collected from the bush, so introducing it as an agricultural crop has millions of questions that need to be answered. Yields, cultivars, flavour differences, harvesting practices and fertiliser requirements are all questions for which there are pretty much no answers. We have a study going on with the University of Sydney this year, which is looking at the changes in flavour and colour profiles of Mountain Pepper over the two-month harvest period, and how air-drying or freeze-drying alters this.

WHY TASMANIAN MOUNTAIN PEPPER?

We'd never heard of Tasmanian Mountain Pepper when we bought Bronzewing Farm, but the farm has a small area of remnant bush with 100-year-old Eucalyptus trees in it. Nestled underneath a few of these trees was a few smaller trees which Sharon (armed with a book on Tasmanian trees) suggested I should taste. I tasted a leaf,



which tasted a little bushy to start with, but quickly developed a high heat on the back palate. That was our introduction to Tasmanian Mountain Pepper. However, a few plants doesn't make a crop so we have taken selected high-heat cultivars, propagated them in our greenhouse and then planted them under organically-certified weed matting with drip irrigation. The process is painfully slow, with plants needing two years in the greenhouse before you can plant them, and then another four to five years before you get a crop worth harvesting. Our oldest plants are now eight years old and we should finish planting next year, by which time we will have 5,000 females planted.

WHERE ELSE DOES IT GROW?

The plant is found commonly in parts of Tasmania that are higher than 300 metres. But it is also found in the Great Dividing Range from southern New South Wales to Victoria.

HOW DO YOU HARVEST THE PEPPERBERRIES?

Pepperberries have to be hand-harvested, and gently, as next year's growth comes from out of the centre of the cluster of berries. Damage this and you may not have a crop next year. At best I can harvest around two kilograms of berries per hour. This doesn't sound like much so I like to convert it to the number of berries: 10,000–12,000 berries hand-picked per hour. Then, once air-dried to our DEVIL Mountain Peppercorns or freeze-dried to our WILD Mountain Pepperberries, there are over 40,000 berries.

HOW DO YOU PRODUCE TASMANIAN MOUNTAIN PEPPER YEAR ROUND?

Harvest of the berries is continuous from April through to early June, however, we immediately freeze each day's harvest. This extends our processing period out to over nine months of the year. Add to this that the dried pepper has a shelf life of over three years, and then you wind up with a

product that can be supplied year round.

WHAT IS THE DIFFERENCE BETWEEN THE FEMALE AND MALE PEPPERCORN PLANTS?

The male plants have flowers that produce only pollen and hence no berries. The female plants have flowers that have no pollen but produce the berries. This arrangement is not unusual in the plant world—kiwifruit, for example, have the same separation of male and female plants. There are large taste differences between individual plants in the bush and between young leaves and old leaves on the same plant.

To me, the leaves are the poor cousin of the pepperberries. The leaves taste a bit more scrubby, eucalyptusy, but still with plenty of heat. The pepperberries, particularly the freeze-dried berries, have much more flavour—a sweetness on the fore-palate followed by a lingering heat on the back-palate, as well as a beautiful red colouration when crushed or ground.

HOW IS TASMANIAN MOUNTAIN PEPPER DIFFERENT FROM REGULAR PEPPER?

Different chemistries. Black pepper, long pepper and the like come from flowering vines in India and South East Asia, and their heat comes from a compound called piperine. Tasmanian Mountain Pepper comes from a small tree and the active ingredient giving the heat is polygodial. There is little similarity in flavour other than both have a strong pungency. It is often said that Tasmanian Mountain Pepper can be used as a substitute for regular pepper, but perhaps we should get a bit cleverer as Mountain Pepper has wonderful flavours and aromas all of its own.

WHAT SHOULD CONSUMERS KNOW BEFORE BUYING PEPPERBERRY PLANTS?

There are dramatic differences in the levels of polygodial between wild plants. Some are hot and some are not (and everything in between). Tasmanian Mountain Pepper plants are sold as that... Tasmanian Mountain Pepper or Pepperberry, no

cultivar identification, no named varieties. Imagine if you wanted to buy a Royal Gala apple tree but your nursery only sold plants labelled 'apple tree'! This consistency aspect is vitally important to us on Bronzewing Farm, hence all our plantings are from our selected cultivars, and all plants are propagated from cuttings to ensure the plants are identical. This gives us a quality level that the wild-collected mountain peppers can't match.

When buying pepperberries there are no standards. With a variable bush crop you take pot-luck on what you get. This is what we are trying to change with our cultivation and product of Tasmanian Mountain Pepper from specific cultivars—a product with consistency that can be relied upon.

HOW ARE PEPPERBERRIES BEST USED IN THE KITCHEN?

First taste the pepperberries. Even most Tasmanians have not heard of Tasmanian Mountain Pepper. I think you have to know the full taste and aroma sensations—and there are big differences between the air-dried peppercorns and the freeze-dried pepperberries. Our freeze-dried Tasmanian WILD Mountain Pepperberries are definitely the superior product—sweetness with bite, and a wonderful purple-red extraction when mixed with water, lemon juice, vinegar or alcohol. Aired-dried products, such as our Tasmanian DEVIL Mountain Pepper have more bite with little sweetness and much diminished extractable colour, but they are excellent in a peppermill.

One tip for all uses is to use a coarse-grind. Mountain Pepper needs to be crushed in the mouth to release the full bite of the polygodial.

Pepperberry chocolate, pepperberry ice-cream, pepperberry-coated macadamia nuts, pepperberry cheeses, pepperberry vinaigrettes and dressings, pepperberry gin, pepperberry crisps. These are just some of the commercial products being made in Australia and elsewhere. [D](#)