



## CEREALS

Bevan Lill, left, with cereal agronomist Ashley Harrison and Nick Brooks from PGW Grain as another trial goes in the ground.

evidence I need with the challenges on this farm to fine tune my own fungicide programme.”

Plus there is the steady flow of visitors, including plant breeders and agronomists, and their expertise and perspective can be valuable in themselves, Bevan says, “Those conversations often lead you in certain directions in your own on-farm management.”

With 400 ha, plus a further 40 ha lease block, he favours a fairly traditional system of 100% crop with 6000 lambs finished every winter.

Forage and turf ryegrass seed is a major part of the rotation, as are mostly autumn-sown feed and milling wheat. Spring-sown crops include linseed, radish, lentils and barley, which follows winter crops of oats and rape. One paddock is also leased annually to a potato grower.

“It is an old model, but when I look around I can’t see any other system that would work much better for us. We have plenty of variables – the balance between turn and forage ryegrass changes, depending on the market, as does the balance between feed and milling wheat.”

### Vital role

Nick Brooks, PGG Wrightson Grain product development manager, says it’s extremely important growers like Bevan make land available on their farms for breeding, cultivar evaluation and agronomy trials.

“We need to select for yield and quality in a range of geographic locations where cereals are grown.”

Nick likens it to stretching the cultivars far and wide so they get a better understanding of not only their strengths but also any weaknesses.

“We ideally want cultivars to be consistent across a range of environments so that they not only have a high overall performance but also deliver to this high standard wherever they are grown and reliably from year to year.

“We do ask the growers a lot to host these trials as they can be large areas (0.5-1 ha) which they need to accommodate as part of their day to day operations i.e. spraying, fertilising and irrigation.”

In addition to having three trial sites in the Methven area, PGW Grain runs trials in Wakanui, Barhill, Greendale and Lincoln (Kimihia Research Farm). ①

# Future profitability lies in supporting R&D pipeline

Some crops sown on a certain Methven farm every year will never contribute to the bank account in the normal way.

**Y**et still land, water, time and other resources are allocated to them, as they have been for decades.

That’s because these crops are valued (highly) for something other than direct financial return.

They were already entrenched in the system when Bevan Lill returned home to start taking over the family business 16 years ago, after finishing his Master of Science at Otago University.

And as far as he’s concerned, without them, and what they represent, “you might as well put up the for sale sign.”

He’s talking about both the Cultivar Performance Trials his father Graeme hosted from the very early days of FAR, and the new cereal cultivar evaluations run by PGG Wrightson Grain on the farm for many years, as well as the company’s internal fungicide trials.

“We’ve always been interested in the pipeline of new cultivars. That’s where our future profitability lies, in new material that gives us incremental gains in yield, and other attributes like improved disease resistance to help us control costs,” Bevan says.

### Permanent increase

“Every yield increase is a permanent increase in farm income. So yes, we need that pipeline for the future. Without that breeding and R&D we’re in real trouble as an industry.”

The cumulative gains of such progress cannot be underestimated, he says.

When he started on the home farm, it was growing dryland Conquest wheat at an average of 7 tonnes/ha, and Saracen at the time might have just pushed 8 tonnes/ha.

Then the first Barrhill Chertsey Irrigation water came on stream in 2010, and Conquest started averaging 9 tonnes/ha, with Saracen at 10 tonnes/ha.

“Fast forward to today, we would average 11.5 tonnes/ha for Duchess, and for the feed wheats, we’d probably be doing 13.5 tonnes/ha,” Bevan says.

“That’s the type of maths you’re talking about with breeding advances. If we can achieve that as an industry every decade, that’s phenomenal.”

Even so, wouldn’t it be easier just to wait until the best and brightest new cultivars are released to market, without having to juggle blocks of land and rotations for them for years before?

“It’s still worth doing!”

“The advantage it provides me is I have seen those cultivars for a number of years, before they hit the market, under my management, on my farm.”

### Evidence, security

“That gives me an incredible amount of security as to how they will perform here.

“In the fungicide trials here this season, for example, we have the upcoming PGGW Grain premium milling wheat (KMW2206). Watching that work throughout the season will provide the