No prisoners in weeds-seed war

By Catherine Norwood

Ray Harrington loves a good deal on second-hand farm equipment, but when it comes to taking his purchases back home to his farm business at Darkan, in Western Australia’s Great Southern region, he is also fastidious about their cleanliness.

Ray has been known to insist that a seller re-clean a header before he was willing to take possession. It is an insistence based on his own experience of finding numerous weeds and crop seeds lodged in machinery purchases he has stripped down himself – including an airseeder imported from Canada.

He has also turned down good deals where he felt the likelihood of importing weeds outweighed any savings on the machinery. “It just isn’t worth the risk; we already have enough pests and weeds to contend with,” he says.

Ray farms with his nephew Tim and Tim’s wife Vickie as RB Harrington Farms. Their enterprise covers 2000 hectares over three properties, with a focus on three grains grown in rotation: canola/imidazolane-resistant barley (Scope®)/conventional barley/canola/wheat/wheat. They run 1500 lambs on 200ha of pasture.

Ray is also involved in a corporate farm, known as Harrington Bros, with his brother David and David’s three sons, farming a further 3600ha.

Ray says weeds on adjacent properties and more vehicle traffic onto the farm have increased the biosecurity risks to the farm business. He often runs field days, but has a dedicated parking area for visitors and requires all attendees to check boots and vehicles for weed seeds before the field day begins. The event does not start until any plant matter discovered is destroyed on site.

With consistent effort, he feels he now has the jump on deadly nightshade, but it has taken five years to get there. Thistle, cottonbush, fleabane and bedstraw still require ongoing vigilance at the local level and Ray tries to physically remove these weeds, if possible, while numbers are still low.

Ray’s long-term commitment to crop protection has included the development of the Harrington Seed Destructor (HSD), which removes weed seed before it can germinate.

He has been working on the HSD for the past seven years, in conjunction with Professor Steve Powles and Dr Michael Walsh of the Australian Herbicide Resistance Initiative at the University of WA, and Nick Berry and Dr Chris Saunders at the University of South Australia.

He is also investigating the potential of attaching WeedSeeker® technology to the harvester. Dealing with weeds at harvest offers another ‘on-the-go’ control option while the weeds are small. The downside at the moment is the cost of implementation.

He says biosecurity is about knowing your pests, assessing the risks and making management decisions. “It is something that needs to be internalised, which becomes part of your psyche, and is embedded into the farming operation.”

One of the emerging issues, given the findings of GRDC-funded research, is ‘breaking the bridge’ for stored-grain pests, which have been found to travel up to 1.2 kilometres from storages to find harbour in native bushland when silos are empty.

Ray says it is not possible for him to provide the required buffer zone between his storages and bushland, but knowing about the issue has allowed him to take other steps. He already keeps his on-farm grain storage to a minimum, and only keeps as much seed as he needs for the next season – holding it for six months at most. Whatever is not used is sold to a local dairy farm.

If, and when, he buys new seed, Ray ensures it is either certified seed or only comes from farms he knows are as diligent as he is in maintaining crop hygiene. He has, at times, conducted his own in-crop field inspections before purchase.

Ray says he is heartened to see other members of the farm business adopting high-level biosecurity control practices. “It is hard to put a dollar figure on such biosecurity practices, but common sense tells you it is worth it in the long run.”
Ray Harrington says reducing the risk of introducing new weeds is worth the time and discipline it takes to thoroughly inspect second-hand machinery purchases.