



WHAT IS WEEDSEEKER®?

Agricultural producers and contractors are reaping the benefits from sensors that can be used to selectively apply herbicides, insecticides, fertilisers and fungicides to plants in an agricultural, horticultural, viticultural and industrial situation.

WeedSeeker® users are achieving up to 90% savings in fallow herbicide; substantially reducing costs and significantly delivering environmental benefits.

The WeedSeeker® system is designed for use on any crop free surface, such as under vines or trees, between row crops, industrial situations or, most commonly, on broad acre fallow paddocks.

It has also been used successfully to target pest weeds in fields of grass without killing off the grass.

HOW IT WORKS

The WeedSeeker® technology uses sensors and nozzles spaced at 380mm apart. This spacing is due to a narrower field of view of the sensors compared to a 500mm spacing on a standard boom.

The WeedSeeker® will spray only weeds, not bare ground. WeedSeeker® technology is effective wherever weeds occur intermittently, and can be fitted to most boom sprayers.

WeedSeeker® is being used in agriculture, along roadsides, railway corridors, airport runways, golf courses, parking lots, median strips, parks and hiking trails, etc. The possibilities are only limited by our imagination.



HISTORY

Crop and weed sensing technology has existed as a research tool in Australia since 1984. The concept was originally developed by researcher Warwick Felton at the DPI Tamworth, NSW.

The reliable application of the concept in agriculture has only been possible with the commercial release of WeedSeeker® and GreenSeeker® selective application equipment.

Selective spot spraying technology was commercialised in the United States in the mid-nineties and has found wide commercial application around the globe in all types of environments.

APPLICATIONS

- Broadacre fallow spraying
- Field target weed spraying
- Shielded spraying in row crops
- Industrial (councils, railways, airports and schools)
- Channel spraying
- Tree crops
- Fungicide, insecticide and fertiliser applications in vegetables
- Vineyards

BENEFITS OF USE:

Reduce herbicide costs – international research has shown savings in herbicide use of 50-80%. Commercial use of the WeedSeeker® systems within cropping operations in recent years has resulted in a reduction in fallow herbicide use of up to 90%.

Herbicide resistance - Australia was one of the first countries in the world to discover resistance in annual rye-grass (*Lolium* sp) to the common fallow herbicide Glyphosate. There was a case of herbicide resistant rye-grass in the Marlborough region in 2012. The WeedSeeker® allows you to use mixtures of different herbicide groups, which may be currently too expensive to apply in a blanket application. This will prolong the life of existing herbicides and reduce resistance in weed populations greatly improving sustainability of cropping systems.

Reduction in herbicide drift - The total chemical released by the boom is substantially lower due to only spraying the weeds and not bare soil. The risk of herbicide drifting onto non-target areas and the surrounding environment is reduced.

Increased adoption of no-till - Reduced tillage cropping systems can provide environmental benefits in terms of reducing soil erosion by wind and water. Reducing herbicide use improves returns further and allows more farmers to adopt the system to the benefit of the whole agricultural landscape.

Environment - reducing chemical load in the environment benefits the whole community.

Water Saving - reduce the amount of water used by covering more hectares per tank load. Save time not having to fill tanks as often.



FEATURES

- Weatherproof
- Operational both day & night
- Modular system that can be easily added to
- Capable of speeds up to 25km/hr
- Optional GPS logging
- Sensor: weight 1.2kg; length 27.5cm; width 8cm; height 13cm
- 12 volt power
- Goyen 12 volt fast fire solenoids
- Optional radar speed control
- Smart-N System available as an inexpensive upgrade

SMART-N UPGRADE

A technology has been developed by Agri Optics New Zealand Ltd, using a VIS/NIR sensor that is able to identify urine patches on grazed pasture and, through the use of liquid fertiliser, can then avoid applying any further nutrient to the patch.

The Smart-N system is also capable of delivering a nitrification inhibitor to those identified patches.

A Smart-N brochure containing full information is available from Agri Optics NZ Ltd.

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'the future of farming'