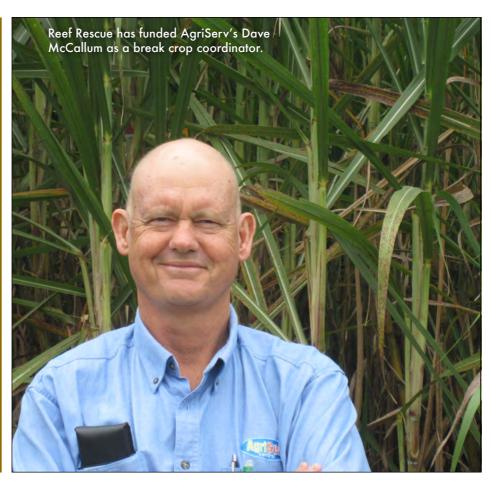
Break Cropping 2011



Reef Rescue Case Study: Break Cropping

Dave McCallum's role as a break crop coordinator is funded by Reef Rescue

Break cropping is the term associated with introducing a crop rotation into a main crop or monoculture. By introducing a break crop a number of benefits can result for the land manager including increasing nutrients back into the soil, particularly nitrogen, and providing a secondary income source for the grower.

Break crops also provide a number of environmental benefits such as providing cover to bare ground during fallow, reducing the loss of soil and particulate nutrients, and breaking the cycle of weeds, pests and disease associated to the main crop.

For the past few years Reef Rescue has funded AgriServ to provide the services of Dave McCallum as a break crop coordinator.

Dave's role as coordinator is to provide information and advice to growers on break crops. This includes assisting in securing inputs such as seed, coordinating the use of planters; including contractors and harvesting equipment, running variety trials and answering any questions growers may have if they are interested in trialling a break crop. Dave also coordinates the bookings for the BSES legume planter which growers are encouraged to use if they would like to trial a season of a break crop before deciding to purchase a planter themselves.

In the Mackay Whitsunday region, break crops, and in particular legume break crops, are increasingly being used to provide cover during fallow and increasing soil nutrients. Using nitrogen fixating crops such as soya bean can greatly reduce the amount of additional nitrogen required to be applied in the following season.

Reef Rescue is funded through the federal government's 'Caring for our Country' program.





Break crop plants:







Reef Catchments

Reef Catchments is the regional NRM body who oversees the Reef Rescue program in the Mackay Whitsunday Isaac region on behalf of the federal government.

Contact Chris Dench at Reef Catchments on (07) 4968 4200 or

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"The results speak for themselves," said Dave McCallum. One survey undertaken in 2008/2009 estimated a saving of 80 000kg of nitrogen from planting 868 ha of soybean. Break crops can be either harvested to provide a secondary income source for growers or they can be worked back into the soil for an added nutrient gain.

"This reduction in the amount of additional nitrogen applied and the benefits of providing ground cover during the wet season help tremendously in reducing the loss of particulate nitrogen lost through soil run off, the nitrogen is then available to be used by the following crop," said Dave.

The number of hectares of legumes planted in the Mackay Whitsunday Region has increased significantly over the past four years. In the 2007/08 season, 600ha of break crops were planted. This increased to 3033ha in 2009/2010. In the 2010/2011 season, 4000ha were expected to be planted; however due to the constant rain since August that number has been lower than predicted. "Having extra planters in the region means that planter availability is no longer the issue it was a few years ago. We started out with 30 soybean planters in the region four years ago and now have around 100 which shows how popular break crops are becoming," said Dave.

While soybean is the most commonly used break crop in the Mackay Whitsunday region there are other crops that can be used including mungbeans, peanuts, lablab, and cow and chick pea. While all of these crops fix nitrogen, some crops can increase the number of nematodes in the soil. It is best to talk to Dave to find out what would be best for your soil.

Legume planters are an eligible activity under Reef Rescue funding. If you would like to trial a season of break cropping, contact Dave and book the use of the planter in time for the next fallow season.

If you are interested in finding out more about break crops and the use of legume planters contact Dave McCallum of BSES on ph: (07) 4963 6834 email: DMcCallum@maps.org.au