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A Feasibility Study of the Area Use Royalty System for Fodder Crops in the United Kingdom

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Foreword

RIRDC has supported the funding of the National Oat Breeding Program to develop varieties specific for oat hay production in Australia. As a result of collaboration with the South Australian Research and Development Institute (SARDI) the National Oat Breeding Program has released five new hay varieties. Currently the only collection point for royalties is through the oat hay exporters that are members of AEXCO, the oat hay commercialising company. For several years now discussion has occurred between the Australian Exporters Company (AEXCO) and the Australian Field Crop Association (AFCA) regarding the feasibility of a royalty collection mechanism to support the collection of royalties on the domestic production of hay. During 2008 Professor Don Marshall completed a review, on RIRDC's behalf, of the National Oat Program, and as part of that review recommended RIRDC investigate the feasibility of an Area Use Royalty Collection Scheme.

In this report, the author, Peter McCormack, meets with Chris Green, a Director of Green Resources UK who has successfully developed and implemented the Area Use Royalty scheme in the UK. Mr McCormack also met with private plant breeding companies, farmer organisations, attended the British Society of Plant Breeders AGM, and met with companies responsible for the implementation and administration of an Area Use Royalty Collection Scheme. These findings are included in this report.

This report, an addition to RIRDC's diverse range of over 2000 research publications, forms part of our Fodder Crops R&D program, which aims to facilitate the development of a sustainable and profitable Australian fodder industry producing quality product.

Most of RIRDC's publications are available for viewing, free downloading or purchasing online at www.rirdc.gov.au. Purchases can also be made by phoning 1300 634 313.

Craig Burns
Managing Director
Rural Industries Research and development Corporation

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Summary

My tour of the United Kingdom, arranged by Chris Green, included 10 days of visits with seed producers, seed marketers, trial managers, the British Society of Plant Breeders (BSBP), plant breeders, private commercialising companies, royalty collectors and a grain trader as well as some opportunities to visit oat trial sites in Scotland and Wales. Chris arranged a full schedule for the time I was in the UK which gave me the opportunity to discuss royalties and royalty collection with a cross section of people involved in the process.

Itinerary

Monday 10 May, Kinross, Scotland

Travelled to Kinross and met with Peter McLellan a Director of Alexander Harley Seeds. Alexander Harley Seeds are the largest seed production companies in the United Kingdom and have the sole rights to oat seed production in Scotland and England. Peter took me to look at several oat seed crops in central Scotland including new varieties Mascani, Balado and Gerald.

Tuesday 11 May, Glenrothes and Balgonie, Scotland

Today Peter took me to meet with Adam Christie and Greg Dawson of the Scottish Crop Agronomy Group. Adam is the Senior Technical Trial Coordinator for Scotland and Greg is his trial technician for the Fife area. We visited several of their main trial sites in the Fife region including winter and spring oat trials. I took notes on varieties that might have a role to play in the oat program. Peter, Adam and Greg were all concerned that the season was at least four weeks later than normal and it was extremely dry for the time of year. Peter was concerned that seed production crops would be very poor this year.

Wednesday 12 May, Edinburgh, Scotland to Cambridge, England

Travel day. Travelled by train from Edinburgh to Cambridge six hours

Thursday 13 May, London, England

Travelled to London to attend the Annual General Meeting of the BSPB. The morning sessions were taken up with business meetings and the afternoon was a seminar format.

Friday 14 May, Cambridge, England

Today was spent with Chris Green and his staff at his Senova office learning about the Area Use Royalty Collection Scheme (AURCS).

Sunday 16 May, Cambridge, England to Aberystwyth, Wales

Travel day. Travelled by car from Cambridge to Aberystwyth six hours

Monday 17 May, IBERS, Aberystwyth, Wales

Today was spent in discussion with staff of the oat breeding program in Wales. Dr. Athole Marshall, Principal Investigator, for the oat program explained to me the way the program works and in particular now how they are working with the private funding for the breeding program. Athole explained the programs collaborative arrangements occurring with millers, commercialisation companies and end users. In the afternoon I met Dr. Sandy Cowan and we looked over the trials and

discussed the possibilities for germplasm exchange. Finally Athole and Sandy took me on a brief tour of the facilities.

Tuesday 18 May, Aberystwyth, Wales to Cambridge, England

Travel day. Travelled by car from Aberystwyth to Cambridge six hours

Wednesday 19 May, Ely, England

Chris Green and I travelled to Ely in Cambridgeshire to meet with Dr. Penny Maplestone, CEO of the BSPB. Visited the “Cereals” trial site.

Thursday 20 May, Newmarket, England

Today Chris took me to meet with Richard Mason in Newmarket, Cambridgeshire.

Friday 21 May, London, England

Travelled to London to catch return flight to Australia.

Purpose of the travel

The National Oat Breeding program each year releases new and improved varieties and growers readily adopt these varieties and benefit from the genetic improvement. Through our commercial partner the Australian Exporters Company (AEXCO), the owners collect royalties on export oat hay production but not so on domestic production (estimated to comprise 40 to 50% of total production). Therefore we are only capturing royalties on less than 20% of total oat hay fodder production. Currently the only collection point for royalties is through the oat hay exporters that are members of AEXCO, the oat hay commercialising company. For several years now discussion has occurred between the AEXCO and the Australian Field Crop Association (AFCA) regarding the feasibility of a royalty collection mechanism to support the collection of royalties on the domestic production of hay. During 2008 Professor Don Marshall completed a review, on RIRDC's behalf, into the National Oat Program, and as part of that review recommended we investigate the feasibility of an Area Use Royalty Collection Scheme (AURCS).

Chris Green a Director of Green Resources UK has successfully developed and implemented an AURCS in the UK. I intend to familiarise myself with how this system has been implemented as I believe we could adapt this model to suit royalty collection on domestic fodder production in Australia. This scheme would not be developed to replace the existing End Point Royalty (EPR) scheme already in place to capture export hay production but an additional model to aid capture of a royalty on domestic production. The outcome sought is to ensure that the domestic industry contributes to the benefits derived from the genetic improvement in oat hay varieties.

With increasing opportunities for the growth of existing demand for oats in export and domestic markets, it is incumbant upon the National Oat Breeding Program to provide varieties that offer a broad range of maturities, adaptation and genetic improvement to the increasing areas of oat hay production. This would be a major benefit to the Australian hay and animal industries. By increasing areas of oat production and improving royalty capture, coupled with the release of widely adapted new varieties, it ensures that there is continuity of supply of high quality oat varieties to the hay and feed industries.

Benefits and Significance

I met with Chris Green and his staff at his Senova office learning about the AURCS. They took me through the whole process of how the royalty is collected and managed. I was shown the software program that has been developed to track sales and distribution and to generate invoices. I was told how they go through follow up with growers if they feel there is a false or misdeclaration. There is in excess of 3,000,000 Pounds Stirling of royalty evasion per annum in the UK in just "over the fence" trading, not to mention what is lost in false or deliberate misdeclaration, it could be as much as double that figure.

I plan to assess what Chris has shown me, along with what others are doing in the UK as there are two royalty systems in place, and prepare a presentation to be presented to the South Australian Research and Development Institute (SARDI), Australian Field Crop Association (AFCA), Rural Industries Research and Development Corporation (RIRDC) and Australian Exporters Company (AEXCO). I intend to discuss what I have learnt with the Executive Officers of AFCA and AEXCO including what aspects of the AURCS we might adopt in Australia before the presentation is delivered. This will enable us to undertake a value assessment, prior to preparing the presentation, which would include some recommendations. The discussions will determine if all or just components of the AURCS might be able to be adapted to suit Australian conditions. The benefits to SARDI and Australia is an improved royalty collection system adapted to fit the seed production and sales business of AEXCO/AFCA, and better capture royalties owed on the improved genetics being delivered to the hay industry in Australia.

Chris Green and I met with Dr. Penny Maplestone, CEO of the British Society of Plant Breeders (BSPB) in Ely, Cambridgeshire. Penny explained the role of the society and how it functions as the royalty collection agency for the BSPB. This is a separate royalty than that collected by Chris's AURCS. This is a seed royalty and a royalty collected on farmer saved seed. Something that is unlikely to gain any popularity in Australia! Penny also said there is some sensitivity to Chris's AURCS and the National Farmers Union is opposed to an expansion of Chris's system to other varieties. In the afternoon we visited the cereals site, which is a trial site for a field day that is very much like the Hart field day in South Australia.

Chris and I met with Richard Mason in Newmarket, Cambridgeshire. Richard has recently sold a successful grain trading company that dealt primarily with trading in naked oats. He explained how he developed a contract production system around a closed loop marketing arrangement. He purchased all grain produced and then sold it to the poultry and bird seed industries. This was a high value grain and he had no trouble with leakage of grain for seed over the fence. Chris and Richard spoke of using trademarks or branding as a more effective means of deterring over the fence grain trading. Generally for the first 1 to 2 years after the release of a new variety breeders and commercial partners know what has been sold to whom. However, when a variety reaches maximum production less is known about who has seed where and it becomes difficult to collect royalties.

I was invited to attend the Annual General Meeting of the British Society of Plant Breeders (BSPB) in London. The morning sessions were taken up with meeting business and the afternoon was a seminar format.

The first of the seminars was given by Thomas Jolliffe, BSPB Chairman. He spoke of the "track record" of plant breeding and how improvements in varieties had occurred over the years and how there is a "broken pipeline" between the public and private sectors regarding plant science and research. Thomas made a call for greater investment in crop genetics from all sectors.

The second seminar was given by Donald Webb, an economic consultant, contracted by the BSPB to evaluate the "Economic Impact of Plant Breeding." As part of the evaluation he was asked to focus only on a small number of crops, highlight the benefits to farmers, processors and end users, and to

highlight the benefits to government. One of his findings indicated that 90% of the wheat yield increase from 1982 to 2008 is due to plant breeding which equals 1.9 tonnes per hectre. He concluded that for a 25 million GBP investment the impact showed a gross benefit of 1 to 1.4 billion GBP to the UK economy plus helping to safeguard a further 1.4 billion. This is a cost benefit ratio of 40 to 1.

The third seminar was given by Richard Summers BSPB, Chief scientist, on “Meeting the Food 2030 Challenge”. Richard spoke on the challenges and research opportunities which included, global population growth, climate change, pressure on limited resources, biodiversity and improved productivity. The final point, improved productivity, is where he saw the greatest opportunities for plant breeding and plant science.

Due to the nature of the trip there are no commercial business opportunities, but maybe some improvements to existing business.

From the visit to the Institute of Biological, Environmental and Rural Sciences (IBERS) in Wales we will establish a germplasm exchange program with the oat breeding program.

Recommendations

I have identified 3 topics that will form the core for discussion and preparation of my presentations.

1. Valuing genetics, the financial gains (first draft of presentation prepared)

2. Trademarking or branding

3. Grain sales tracking

I intend to prepare a presentation on “valuing genetics” after consultation with the Executive Officers from AEXCO and AFCA.

I will have discussions with SARDI’s Executive Officer Aaron Mitchell, about trademarking and branding, Aaron has a Phd in this area.

Establish a germplasm exchange agreement between SARDI and IBERS Oat program in Wales.

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The author would like to acknowledge the support from the following organisations and people.

The Rural Industries Research and Development Corporation (RIRDC)

The South Australian Research and Development Institute (SARDI)

The Australian Field Crop Association (AFCA)

The Australian Exporters Company (AEXCO)

Mr. Chris Green, Green Resources UK

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Chris Green, a Director of Green Resources UK has successfully developed and implemented an Area Use Royalty Collection Scheme (AURCS) in the UK. The purpose of this study trip was to visit the UK to gain information which may be useful in implementing a similar system in Australia.

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