## REPORTS FROM WORKSHOPS -REVIEW OF ALL SESSIONS

## Convenor - H. Blain

One of the things that struck me is the similarities between the United States and New Zealand industries and the difficulties with prioritising where you should be going with research, because I find that is a very difficult problem with our industry as well.

In the grain legume field there are still a lot of unknowns; disease control is very important and there are still large gaps that need to be addressed; we need to look at farming systems and determine how that crop fits into the farming system as far as rotation is concerned. There are signals from the feed industry that we should identify three agronomically suitable crops that would fit in with the rotation, possibly one in the North Island and two in the South Island.

The cost factor is very important as far as the feed industry is concerned and high yield is important. Any crop has to be important for the farmer too. If you have a crop that is not going to be profitable to the farmer then it's not going to be grown. There is a need to evaluate price as well as the marketability of the particular crop.

One of the things that was discussed was the lack of good market information. Particularly the need to know what the markets are before we develop the varieties, instead of developing varieties and then hoping we can find a market for it. Research is a long range activity and the feeling is that on some projects we have got a good start but we need to proceed further as, for example, with aphanomyces and different management techniques that might be able to allow us to control disease until such time as resistant varieties are found.

I think another thing that was pointed out is that

research programmes need to co-operate with researchers in other countries and probably New Zealand does as good a job as anybody, better than the United States, but that needs to be continued. But I think it's important to network with all researchers and personal contact is very important. For my own purposes, it is much more important to me being here at this conference than to just receive the results.

We discussed the long range industry plan that we need to look at as far as research is concerned. The United States industry went through a similar exercise last spring as to where the industry was to be five years from now. I understand there is been some of this done at Lincoln but I think it is very important to see where you are going five years from now because research is not a year to year thing. It is at least a three year commitment and is usually a five year programme.

One thing pointed out was the need for better representation from merchants and farmers. There was some disappointment at the small number of farmers and merchants that we had at this conference. Efforts should be made to develop a better relationship between the merchants and farmers and possibly there is an opportunity now to build on this conference and see if you can not get a better working relationship between the various sectors of your industry.

One other thing that was pointed out is the lack of statistics on legume crops. It was noted that there is a Government survey that maybe could be expanded on to get the type of information that I think is absolutely necessary from both a research and a marketing standpoint.

## Convenor - Nicky Jenkins

Our discussion centred on identifying the market, how the market can be met, what research was required, what was the best way to get the industry up on its feet and what actions should be taken as a result of this symposium.

The domestic livestock feed market seemed to have a great deal of potential and there the major aim seemed

to be to increase the yield of cultivars dedicated for feed production. We discussed whether there should be a payment for grain legumes on a unit protein basis. Processors identify crops such as lupins and faba beans as being the preferred types because they are not linked into a secondary industry such as soya beans which are linked into the oil industry. We also considered the need to expand the land area devoted to grain legumes taking into account the varying requirements particular crops. Grain legume research has been concentrated around the Canterbury area, particularly Lincoln and this could well bias farmer attitudes towards the crops and there could be great potential in conducting more research and development in the North Island.

Aphanomyces is currently a limiting factor in reducing the land available for grain legume crops, research on crop rotations such as the incorporation of brassicas in the rotation, and aphanomyces disease resistance may also be very helpful in increasing the land area available.

The next issue we considered, was who should be responsible for taking a lead in the development of the feed market. We felt that processors could give a lead by providing forward contracts and also by helping to identify the markets. Processors have identified a potential for replacing meat meal with vegetable protein. However, forward contracts on a fixed price basis may not be totally acceptable to growers. Growers like to have flexibility of contract options so that they can weigh up the risks involved from the export market against a guaranteed return locally. There was also some discussion on the extent to which uncommitted (free) peas are being grown this year. When the financial situation is better, farmers are prepared to take the risk which they wont in more difficult times.

We identified a timing constraint in getting contracting underway due to processors getting linked into importing. Thus an immediate response is required. It was agreed that it should be an industry approach and that all the sectors had something to gain from getting the industry up and running. However, if you include all the players, we would probably get out of control and

end up being unproductive. So the idea was to liaze with the industry and set up a task force which identified general items arising from this symposium and having identified these items, then call a greater industry meeting to get some action underway.

We ruled out targeting the retail end of the market. We decided the commodity side was probably the better priority at this stage. We felt that there was a lot growers could do to improve the attitude of other growers to extend land areas through education and improving grower confidence by providing management advice to growers. Processors felt that they couldn't really consider an agronomic backup system similar to Wattie Frozen Foods because the commodity just does not justify that sort of involvement. However, there was very definitely a contribution to be made by the grain trade in providing management support so that growers can be persuaded that it is not too difficult to grow grain legumes.

We also agreed that there was a need for more statistical information and that we should be getting the Statistics Department to actively promote the benefits from accurately completing farmer surveys.

We also talked about the way Americans get information on seed sowing from the merchants and it seems that it is feasible, perhaps, to get information on lentils that way because there are only two merchants handling lentils. We could start off the system with lentils and then maybe expand it to other species. But there is definitely a problem for peas with the amount of seed that is saved by farmers for use on the farm.

The final question we addressed was "Who's going to get all of this underway?" The group decided that it should be Federated Farmers, so I will be looking for assistance!

## Convenor - W.A. Jermyn

Our group felt that there were strong similarities between the New Zealand industry and the American industry as determined by the American Dried Pea and Lentil Association (ADPLA) experience. We see New Zealand as being towards the high value, added-value end of the market, closer to the American scene than the Australian scene.

The specific recommendation that we wish to carry forward to a task force, is that the nutritional aspects are a key area for future research. This will of necessity involve biotechnology; but very certainly it came through from the session yesterday as being where grain legume research is deficient. A benefit of biotechnology has been in enhancing substantially, rather than contributing to, the environmental worries that people legitimately have about multiplication of plants and organisms.

We identified two other research areas as being important. One comes down to sustainable agriculture

and that includes basic management research on how to do the simple things well.

The other, on which we agreed with Harold Blain, was that there are some grain legume alternatives around but that their value within the rotation needs to be looked at as well as their profitability. There is also a need for information on the relative values of all the legume feed options.

The group felt that lack of markets was not a constraint. The problem that everyone has identified is lack of product to fill existing markets, specifically processed peas, red lentils, vegetable grain legumes for freezing and soya beans.

When it came to trying to formulate some recommendations as to an industry approach, or structure, we struck a vacuum. We endorsed the need for a forum. We need to start with market information, stocks information and production information. We wondered if that information provision might be a job contracted out to an existing bodies such as, Federated Farmers who have a newsletter, DSIR Crops, or a seed firm, or an exporter. We need to examine the feasibility of a new structure like the ADPLA which has as its focus, information exchange, new cultivar promotion, and the enhancement of research. The marketing needs to be left to the industry.

We would like to see the recommendations from this workshop go to MPs, MAF, MORST, MERT, DSIR, NZ Grain and Seed Trade Association, Pesticides Board, Grocery Manufacturers Association and Watties. There is enormous unused potential for a feed processor and other processors in our industry to use that facility to add value to our existing crops.

Question: I just wanted to question the comments Professor Field made about making recommendations to MPs, government departments etc. To what extent should we still be relying on the Government to help us or should it be up to the industry to get its act together and get together themselves?

Answer: I think that it is certainly up to the industry to provide the leadership, but the government also has a role in helping those who are seen to be helping themselves. I think we would all agree that we can't depend on them for anything.

Comment: It seems to me that this industry should really be trying to tap the Medical Research Council funds with improved dietary procedures and the viability of this material. It has become apparent that one of the outcomes that the DSIR is contracted with the Government to provide, is improved human health. It

seems in the grain legumes we have an enormous opportunity to enhance the Government's wish to improve human health and we're just not making the best use of what we have before us.

Comment: I don't know how strong the environmental groups are in New Zealand, in the United States they have become extremely strong. They are not only very vocal but they are very well financed and what we are trying to programme right now is because one of their main objectives is to eliminate all fertilizers and chemicals and this type of thing. So what I would say is, instead of being defensive, which we have been, we have got to go to them and say, look, if you want us to find better substitutes then how about funding research projects that help us eliminate the amount of chemicals we are using (or erase them); because they have some very good sources of finance which they use primarily for legal purposes. Encourage them to take a lead in funding some of this research.

Question: In the value added area of legume processing, how does Watties see itself getting involved?

Answer: I do not think Watties are short of markets, we want the product and we could sell it.

Question: Is product supply a major limitation?

Answer: Yes, a number of new crops we could sell tomorrow, we just do not have the product.

Comment: We have in place now, a system where growers are asked to keep a pesticides diary as we have continual enquiries from Japan. We are compiling a pesticides residue register for our company. They are the sorts of questions a lot of our customers are asking for now. They want to know what fertiliser we have put on, what herbicides, insecticides etc. and we have got to assure them that it's been proven.

The dry pea market will probably not be too far behind the fresh market in regard to information requirements about possible residues in the product.

Question: I wonder if there's been a breakdown in communication between Watties and the growers, given the requirement for product and presumably unfilled contracts. Or is Watties not taking it to the growers?

Question: One of the problems is we just have not been able to find enough pea growers this year, our understanding is that the growers just didn't want to accept the risk of losing the crop with last year's drought and the downy mildew disease problem. Even though we increased the price quite considerably for late peas we still aren't able to fill our requirements, probably because by that time growers had chosen other options?

Comment: I am a grower and we are moving into some crops and we found that we can not find seed sources. We approached Yates and Pyne Gould and DSIR Crop Research and in no case could we find seed. I eventually had to go to a health food wholesaler just to buy my seed supply which is less than ideal. This is for chickpeas, red kidney and soya beans.

Answer: It has come up over the last two days that a lot of alternatives are available, but they're being strangled because the seed supply is not there even though there is a market. Also one of the reasons that the pea acreages have declined is a shortage of peas for seed over the last couple of years.

I think one of the problems with a traditional crop is that you have merchants handling these crops on commission or brokerage which means its only when they get a volume of through put that they get the returns they require. You do not get that in the developmental stages and if they are not assured of recovering their costs they may not be interested in taking it through. Or if they cannot capture those

markets for themselves, other merchants who have played no part in developing it, then come in and cash in on their investment. So there is a threshold where the costs are growing and there are few returns. This is a typical problem facing any innovator trying to establish or develop a new business.

Question: Would anyone like to comment on that? How are we going to facilitate the early stages of developing new crops? It has been suggested that individuals are unlikely to do it if they can't capture a return.

Answer: You can actually receive funding from the Regional Development Councils - it is a source of up to 50 % funding on certain projects. They seem willing to accept the difficulties and provide assistance in the early stages. The other thing that may help to retain a market advantage is to inject funds at the pre-commercial stage and retain control for longer through contracting to purchase all produce. The other option is to do the development collectively either through levies or specific consortia set up for that purpose.