

Paper 20

MARKETING MALTING BARLEY AND MALT

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INTRODUCTION

In considering this topic, I think we should have a clear understanding of what we understand by malting barley. It is not a special barley, but a line of barley which has been purchased for malting. It is almost certainly a cultivar which will produce malt with a high malt extract and, most importantly, give a good brew-house performance. It would of necessity follow that beer brewed from such a malt will be stable, will have a good shelf life and head retention, and will pour from bottle or pump to glass without unnecessary frothing.

BARLEY USE

Barley is of course used for many end products besides malting. There is also barley for seed and for feed. To me, this is a better way of describing each of these uses than is usually heard. So often, it seems, feed barley is referred to as barley of poorer quality — it is not suitable for malting and it is not suitable for seed. However, this is clearly not the case, because the better the quality of barley for feed, the better the end product, so the better will be the development and growth of the animals or poultry being fed the barley.

The point I am making here is that there is not a great difference between the quality of a barley for malting and barley for feed, but there are some factors which would make a particular line of barley suitable for feed, but not suitable for malting. Also, there are some cultivars which because of the characteristics of their agronomy, germination or maltability are not suitable for malting, whereas they could be good for feed.

MARKETING

All buyers, whether purchasing for malting or feed, are looking for barley which has a high 1000-corn weight and consequently a low percentage of screenings (thin grains). Before we can market barley it must be produced, and one of the main criteria for the farmer is that a barley must yield

consistently well.

It is not easy to talk about the marketing of malting barley in New Zealand, because in my time I cannot remember any occasion when marketing as such has been in practice. This is because there has been a system of contracting, where maltsters have allocated an acreage to be planted which will produce, on average, the amount of acceptable grade barley required to keep the malt-house and customers supplied. Usually contracts have been on allocation, and the area has been taken up quite quickly. Most contracts are with growers who have a history of contracting barley for malting; our company has many families who have contracted a fairly similar area of barley every season, for two and in some cases three generations.

QUALITY

John Smart has written about malting quality characteristics, and it follows that the easiest barley to sell for malting is the one best showing these qualities. New Zealand, with its moderate climate and kind harvesting conditions, can and does produce barley of a quality which will meet the specifications of most international buyers. Our company has also found that with the introduction of irrigation by many farmers, barley quality has improved and in most seasons rejections are very few.

Many farmers would consider that our 1981-82 season was difficult, because of lack of rain in the important months of November and December, yet yields of barley were well above average, and quality was at least equal to the best harvest in the last 20 years. Some growers who farm medium to light soils, and do not have back-up water, produced barleys which had very thin grains and as a consequence were unacceptable for malting. All other barleys delivered, and probably the few still to be delivered, are at least equal to export requirements, and are likely to bring a worthwhile premium over other export barleys which have left or may leave our shores during the year.

Surely then, growers should be encouraged to plant those cultivars which may be in demand by maltsters, and which would reward the growers by way of premium in

prices paid. All new cultivars are evaluated by official organisations which report their results, and buying organisations make further recommendations as to their acceptance. All of this is to assist growers to decide which cultivar would best be suited for their particular soil type and district, bearing in mind time of planting and market potential.

OVERSEAS MARKETS

Let us for a moment consider market size and compare ourselves with the U.K., where on average about 11 million tonnes of barley are harvested annually. Of this quantity, approximately 1.75 million tonnes are required for malting. There has recently been a downturn in beer production, but some of the lessening of local demand for malt has been taken up by exports. It can clearly be seen that preferred malting cultivars do not form a large part of the U.K. crop.

In New Zealand, there could be a total market of something over 200,000 tonnes, maybe as much as 250,000 tonnes. For maltsters to be purchasing at full capacity, and allowing for seed supplies, the annual requirement of malting barley is probably around 100,000 tonnes. Over the last few years there has been a surplus of barley in New Zealand, and thankfully an export market has been available. There have been few occasions, however, when exporters have been able to offer malting barley to overseas buyers. It is possible that the main reason for available cargoes being offered for feed has been that they are made up of a mixture of cultivars. Generally speaking, maltsters do not blend different cultivars during storage. There are some which are compatible in malting, but seasonal conditions can affect particular cultivars differently, and the risk of differences developing during storage is great. My suggestion is that if New Zealand wishes to become an exporter of malting barleys, there will need to be changes in the importance of cultivars.

Cultivars are now available that yield as well as any others, and at the same time are of a type which makes them attractive to maltsters. We must bear in mind that if we are considering export then we are considering cargoes, and if our thinking is not of quantities of 12,000 tonnes or more we are not thinking big enough.

STORAGE

I can again draw on the experience of our company, which, since its conversion from barley in sacks to barley in bulk, has experienced no problems with storage. The germinative capacities of barley can be maintained for more than 15 months, but suitable storage for malting barley needs to be better than ordinary. Briefly, to preserve germination and to assist in the malting of barley corns, storage temperatures need to be lowered. This can be best achieved by the downward flow of cold night air through the grains, for example by means of an exhaust fan or aeration ducts. 'A' frames, placed at the base of the silo and covered with a fine mesh, provide effective aeration when used with an exhaust fan.

Because it seems unlikely that the local market for malt and malt products will increase, we should be looking at producing barleys that we can export as barley for malting. The costs of production are no higher, and I have confidence in my opinion that yields from selected preferred malting cultivars are at least as good as from other barleys being offered to growers. Furthermore, I would like it understood that there is more than one cultivar of barley that meets this criterion.

It is known that the opportunities to market malting barleys in New Zealand are restricted, but this is not true for export. Again, because of the New Zealand situation, it seems more difficult to have other barleys accepted into the New Zealand pattern of buying. Reference has been made to bulk storage. The company for which I work already buys three different barley cultivars. To increase this number would complicate our storage systems, and would certainly slow down intake. This is one of the few complicating features resulting from transferring from bags to bulk handling.

COMPETITION

Who are our competitors? The main ones are Australia, Canada, and the European Economic Community. However, the Australian crop is frequently affected by drought, and the time during which they can expect germination to be preserved is much less than desired. Canada has different problems, particularly with frost before harvest, and if the crop is affected by weather its germination is also impaired. As for the EEC a considerable proportion of their barleys is traded within Europe.

Geographically, New Zealand is well placed, and although our tonnage would not be great, there is an overseas demand for our quality barley, because deliveries made about May arrive in Europe just towards the end of their old season's crop, and before dormancy in the new crop has corrected itself in storage. Deliveries at this time would show a quality advantage over barleys from other exporting countries, remembering that Australia harvests in November-December and New Zealand in February-March.

MALT MARKETING

My final comments are on the marketing of malt, which I can say quite truthfully is difficult. It is difficult because we are just beginning, and still learning. The process of learning is often a lengthy one, and we have to remember that we are competing with others who have been exporting for many years. They have earned a reputation for themselves, and a market share.

The import demand for malt is based almost entirely on beer consumption, as the major use for malt is in the brewing industry. The only other outlet for any quantity would be malt for distilling. This requires a special kilning process, which has not been practised in New Zealand.

Although the changeover is not difficult, it is to be expected that during the change of process some sub-standard quality malts could be produced, and it would certainly take time to build up a sizeable market, to increase the sales of malt to distillers.

One of the great difficulties affecting malt exports from New Zealand is shipping. We must also compare New Zealand freight rates with those available from other countries to the same destinations as ours. There is also the infrequency of vessel departures, and sometimes the **unavailability of preferred types of packing.** My company is currently investigating the question of sufficient containers to safeguard against weather and other delivery hazards. We are thinking about shipments of malt to countries throughout South-East Asia and Japan, where unloading is frequently from the carrying vessel into barges, and from the wharf-side into road transport. The problems of rainy seasons, which are experienced by most of these countries, must also be considered.

CONCLUSION

Barley has many end uses; one of these is malting. There are barley cultivars which maltsters prefer to

purchase. These malt well, and give high extracts and good brew-house performance, producing stable beer. There are barleys available to New Zealand growers which yield as well as other barleys being offered, and malt better. Costs of growing barley for malting are not greater than in growing it for other uses, but generally speaking, premium prices are paid for barleys for malting. The preservation of germination is important for malting barley. This can easily be achieved with suitable storage. Growers should be encouraged to plant preferred malting cultivars.

Geographically, New Zealand is well placed for exporting barley for malting, and worthwhile premiums can be earned, thereby increasing both the prices paid to growers, and overseas income. For export we must think big, with minimum cargo sales of 12,000 tonnes. The mixing of cultivars is not acceptable. Some progress has been made in export sales of malt. For the current year, exports are around 17,000 tonnes. This requires about 22,000 tonnes of farmers' dressed barley. There is additional production available for export and every endeavour will be made to confirm sales. Penetrating the malt market is not easy; it will take time and effort if we are to succeed.