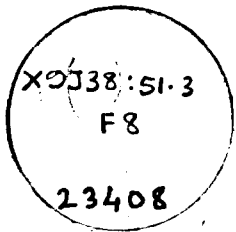


Report on the marketing of Wheat,
Barley and Oats in England and Wales



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MINISTRY OF AGRICULTURE AND FISHERIES.

Report on the
Marketing of
Wheat, Barley and Oats
in England and Wales.

23408

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FIG. 1.—Flour mills at Liverpool.

[Frontispiece.]

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THE MARKETING OF WHEAT, BARLEY AND OATS IN ENGLAND AND WALES.

INTRODUCTION.

The following Report gives the results of a detailed investigation into the marketing of wheat, barley and oats, and covers practically all phases of what is admitted to be an immensely difficult subject.

Among the more important facts to which attention is drawn, is the tendency for the manufacture of cereal products of all kinds, in this country, to become concentrated into larger units. There is no corresponding reduction in the number of farmers selling to merchants or of merchants selling to manufacturers. In the result, the balance of bargaining power has gone against the seller. This, of itself, suggests the need for some form of organisation among producers to reduce the number of independent sellers on the market. Further, organisation of producers seems to be necessary in order to ensure orderly marketing and avoid the seasonal depression in prices which usually occurs in the early months of each cereal year.

Then, again, in order to meet the needs of modern industrial conditions, manufacturers require grain—whether wheat, barley or oats—to be delivered in large quantities of uniform quality. To this extent, home-produced grain is at a disadvantage compared with the standardised products arriving from abroad, and, if the demand for it is to be sustained and increased, there is a pressing need for some form of standardisation. It is evident from this Report, however, that a standardisation policy for home-produced grain cannot be applied by transplanting in its entirety any one system now operated overseas, but that such a policy must be spelt out, letter by letter, to suit the conditions obtaining here. Lines of possible development are set out in the Report.

Apart from these wider organisational aspects, the Report shows clearly that much can be done in other ways to extend the market for home-produced grain. Indeed, no effort should be spared in this direction in order that cereal growers, in the present state of their industry, may realise the best possible returns for their crops subject to the limitations imposed by world conditions. In this task, there is room for co-operation between farmers, merchants, manufacturers and consumers.

APPENDIX A.

GEOGRAPHICAL DISTRIBUTION OF VARIETIES.*

In the following notes, the numerous varieties of wheat, barley and oats are grouped roughly into commercial classes, and varietal localisation] is discussed from a broad, economic standpoint.

(i) Wheat.

(a) *Yeoman Varieties*.—These are customarily regarded as commercially distinctive from other English wheats, either red or white. Yeoman is found in greatest abundance in south Lincolnshire, where, within the last 4 or 5 years, it has almost completely ousted other red wheats such as Squarehead's Master, and now constitutes over 60 per cent. of the total crop. It is also extensively grown in the tract of country stretching south-eastwards from this part through the Fens, Isle of Ely, and eastern Cambridgeshire into Essex. On this strip, Yeoman probably constitutes from 30 to 40 per cent. of the crop, but, according to some observers, this proportion is decreasing and likely to decrease further. Although the decrease is sometimes ascribed to productive factors, it is, in the main, associated with economic conditions. Local millers, for instance, may admit the superior strength of Yeoman for bread-flours, but protest that there is too much grown for their purpose since white wheats and Swedish Iron are to be preferred for biscuit flours.

In Essex, where many growers and merchants find an outlet for their grain in the seed trade, the decrease is partially accounted for by the lack of demand for this kind of seed from other parts of the United Kingdom, and also from France, where buyers are interested in other types of English seed wheat but have no use for Yeoman. Eastward, Yeoman is found in decreasing quantities and, in Norfolk, accounts for not more than 15 per cent. of the wheat acreage. Bedfordshire has from 20 to 25 per cent. of Yeoman, but the proportion is also said to be decreasing, partly for economic and partly for productive reasons. In Huntingdonshire, with from 20 to 25 per cent. Yeoman, the tendency is to increase the acreage at the expense of white wheats. From Hertfordshire, through to Oxfordshire and up to Leicestershire, Yeoman constitutes perhaps 15 to 20 per cent. of the crop on an average. It ranges from as low as 10 per cent. in some parts up to 30 per cent. in others; reports as to its popularity are conflicting, although it is apparently having a considerable vogue in the neighbourhood of Leicester.

Further west, in the counties of Warwick, Worcester and Stafford, Yeoman represents not more than 5 or 10 per cent. of the crop, while in Hereford and Monmouth the proportion is even less, and, in Wales, the variety is only met with on trial plots. West-country critics allege that they cannot get more for Yeoman than for other wheats, that Yeoman does not bushel well or that it yields insufficient straw, or that it reverts to the Squareheads type, and that all wheat grown from Yeoman seed does not show Yeoman characteristics. Yeoman I having once been tried by a farmer and found unsuitable, it is possible that Yeoman II, or any other type bearing the name "Yeoman," however different, may be condemned without trial.

In the southern counties, Kent shows the largest percentage of Yeoman varieties, between 30 and 40 per cent. of the crop consisting of this type. East Sussex is not a great wheat-growing county and the percentage of

* A variety is capable of spreading very rapidly. A description of its geographical distribution can therefore only be temporarily true. This survey is made on the basis of information collected during 1925-6.

Yeoman falls off somewhat. In West Sussex, perhaps 40 per cent. of the crop is Yeoman and the proportion appears to be increasing; around Chichester, the proportion is much higher.

Hampshire and Wiltshire appear to grow only from 5 to 10 per cent. of Yeoman, but in Gloucestershire and Somersetshire, the proportion increases to about 15 per cent. or more in some parts. In Devonshire and Cornwall, the amount of Yeoman grown is infinitesimal; Devon farmers who tried it have given it up owing, it is said, to poor yield.

Of the north-eastern counties, Nottingham has not more than 10 per cent. of Yeoman. In north Lincolnshire, where apparently it is not successful on the chalk, Yeoman amounts only to about 15 per cent. In south Yorkshire, the percentage is low but, in the East Riding, it rises to about 20 per cent. In the North Riding, again, the proportion does not perhaps exceed 10 per cent., but, in Durham and Northumberland, it is grown rather more plentifully; further north, in the Lothians and south-east of Scotland, Yeoman forms about 25 per cent. of the crop.

Cumberland, Westmorland and north Lancashire grow little wheat, apart from some sown to provide thatching straw. In south Lancashire, some Yeoman is found in the Fylde, but, in the rest of the county and also in Cheshire, although wheat is plentiful, the amount of Yeoman grown is practically negligible.

(b) *Other Red Varieties*.—Taking the country as a whole, Squarehead's Master, or wheat with somewhat similar varietal characteristics, may be regarded as the standard type of red wheat and the one mostly widely grown.

In Scotland, probably 50 per cent., in Northumberland and Durham 75 per cent., and in Yorkshire probably 80 per cent., of the total crop is of this type. Swedish Iron is fairly prominent and might account for 10 per cent. of the wheat acreage in these parts, although Little Joss and Brick are preferred for sowing on the Wolds.

In Lancashire, where only 25 per cent. of the wheat is red, and in Cheshire, where the proportion of red wheats is about 50 per cent., Squarehead's Master is the general type, and Little Joss the only other variety worth specifying. In this district, there appears, however, to be a marked disregard of varietal names, and provided the sample looks right, it is judged good enough for seed without any question of variety—a habit which, however, is not confined to this area.

Some 30 or 40 per cent. of the wheats in Wales are red, and these mostly of the standard type. In the counties of Gloucester, Worcester, Hereford and Monmouth, from 80 to 90 per cent. of the wheat is red and, apart from Harvester, which is a little longer in the berry than Squarehead, consists mostly of the standard type. Where late sowing in the spring is necessary, French Marvel or, sometimes, Manitoba wheat is used.

In Somersetshire and Devonshire, where the proportion of red wheat is about 30 or 40 per cent., the bulk is again of standard type with small quantities of Swedish Iron and Little Joss.

In the southern counties, from 50 to 60 per cent. of the wheats grown are red, chiefly of the Squarehead type, although Little Joss is preferred in some parts of Hampshire and Swedish Iron or Harvester in some parts of Sussex.

In the counties of the Thames Valley, wheat of the Squarehead's Master type constitutes more than 50 per cent. of the crop, while Little Joss is popular and constitutes perhaps 15 per cent., except on the strip between Reading and Oxford, where it forms a much higher proportion. Swedish Iron and a little Rivett Wheat are occasionally met with on the lighter lands to the north.

Rivetts are also met with in Bedfordshire, on the light lands which are not good enough for market gardening. From here up to Nottinghamshire and over the Midland counties, red wheats constitute from 75 to 80 per cent. of the crop, and Squarehead's Master type forms rather more than half of this. In some parts of the area, Little Joss and Swedish Iron are said to be

increasing; in others, Swedish Iron has been falling off during the last 3 or 4 years and the tendency has been to grow white wheats instead.

In the eastern counties, Squarehead's Master is losing its supremacy in face of white wheats and Yeoman varieties. In south Lincolnshire, it has practically disappeared in the last few years; in the east of Essex, also, Squarehead's Master is now little grown. Between these two last districts, down through the Isle of Ely, Little Joss is, after Yeoman, the most important variety and, representing over 30 per cent. of the crop, practically equals Yeoman in extent. In Norfolk and Suffolk, however, Squarehead's Master remains the most popular variety and in east Norfolk it probably constitutes from 50 to 75 per cent. of the crop; Swedish Iron is relatively plentiful and there is a good proportion of Dutch wheats and of varieties such as Setter, Bacton Champion, etc., with some Little Joss on light land or for late sowing.

(c) *White Wheats*.—Although Stand Up White, Benefactor, Victor and other white varieties have distinctive varietal characteristics of importance, from a productive standpoint there is little difference between any of these varieties when they come on the market.

In Norfolk and Suffolk, white wheats probably do not exceed 10 per cent. of the crop, although, in parts of Suffolk, some observers report a tendency for this proportion to increase. In Cambridgeshire, also, the percentage is low, and in Huntingdonshire, where they were once held in favour, they are now rarely grown. In Rutland and Bedfordshire, however, white wheats increase to about 30 per cent. of the crop. In Leicestershire, probably from 15 to 20 per cent. of the wheat is white, but this is mostly found in the Vale of Belvoir; in the rest of the Midlands, the proportion varies from 5 to 20 per cent. and, although it is high on the red land to the west of Nuneaton, it probably averages only 10 per cent. of the crop.

Worcestershire and Herefordshire grow about 20 per cent. white wheats, but they practically disappear in Gloucestershire except on the Cotswolds. In Monmouthshire also, the proportion drops, but further west, in Wales, it rises until probably 65 per cent. of the crop consists of white varieties. In Somersetshire, the proportion increases and round Taunton probably 50 per cent. of the crop is white. In Devonshire, red wheat is mostly confined to the hills, and white wheats constitute from 65 to 75 per cent. of the crop. Allowing for these varying proportions, white wheats may be regarded as forming a little more than 30 per cent. of the wheat grown in the south-west.

In the south-eastern counties, from Berkshire and Hampshire to Kent, white wheats do not make up more than 10 or 15 per cent. of the crop, while in Oxfordshire and Buckinghamshire the proportion is even less.

In South Lincolnshire, white wheats still represent perhaps 30 per cent. of the crop, but, in Yorkshire, the percentage is estimated at not more than 10 per cent. of the total. Northumberland does not grow more than 5 per cent., but in the south-east of Scotland, white wheats increase to about 25 per cent. In Lancashire, 75 per cent. and, in Cheshire, 50 per cent., of the crop is estimated to consist of white varieties.

(ii) Barley.

Barley does not lend itself so easily to classification in economic groups according to variety. There is a great difference between a malting and a feeding barley and also between a pale ale malting barley and one intended for use in, say, the manufacture of stout or lager beer. The distinction cannot, however, be made on a varietal basis, because factors of soil, climate, season and time of sowing cause big variations in the crop. Most barley is spring-sown, but, in recent years, the amount of winter-sown barley has greatly increased throughout the south-east of England. In Essex and West Suffolk, the proportion of winter barley is now estimated at from 40 to 50 per cent. of the crop. The varieties which are being employed for this purpose are commonly the same as those used for spring sowing.

(a) *Six-rowed Barley*.—This may be broadly distinguished from the bulk of the crop which is of the two-rowed type. A form of this six-rowed barley, which may either be autumn or spring-sown, is harvested in Orkney and the north of Scotland under the name of "bere" or "bigg" and is, at times, employed for malting. Six-rowed barley is also found in the highlands of Wales and in the west and is plentifully grown on the Downs of Hampshire and Sussex, where it is sown in the autumn and, instead of being harvested, is fed-off by sheep in the spring.

(b) *Two-rowed Barley*.—Two-rowed barleys may be roughly classified into two groups, "older varieties" and "newer varieties," and these again subdivided into "wide-eared" and "narrow-eared" types.

Older varieties of the wide-eared type are represented by Goldthorpe, Fan or Spratt, Archer, Standwell and Plumage, while English and Scotch Common, Old Irish and Cornish, and Chevallier—an early-selected type of English barley—may be regarded as typical of the old narrow-eared varieties.

Spratt is common in the Fen district. On King's Lynn market, it is possible to buy a run of Old Goldthorpe types out of the Fens and west Norfolk. Goldthorpes are also to be found across through Nottinghamshire into Derbyshire and up into Yorkshire and Northumberland, while some are met with in south Buckinghamshire and in Oxfordshire.

Standwell is grown to an appreciable extent in Yorkshire and Northumberland, in Somersetshire and the south-west of Gloucestershire, and on the lowlands of Lincolnshire, where Plumage is also favoured to some extent.

Archers are later in ripening than the Spratt and Chevallier types and are not so suitable, therefore, for the northern parts of the country, but, in Leicestershire, Archer is not uncommon. From here, it extends down into Hampshire and Wiltshire and is found scattered to the east and south-east of this line.

Chevallier is found chiefly on the Norfolk coast and in Suffolk, east Essex, Rutland and the highlands of Cambridgeshire, and constitutes perhaps 10 per cent. of the crop in those parts. It is also grown, to some extent, in Kent and on the wolds of Lincolnshire, Yorkshire and in Wiltshire. It is very difficult, however, to know whether the terms "Chevallier" and "Goldthorpe" are, in every case, used to describe the botanical varieties or are merely used to distinguish between the ordinary commercial types of brewing barley.

The names of Old Irish, Old Cornish and Scotch Common are probably sufficient indication of the locality in each case. In Scotland, brewers express a preference for the old-fashioned Common barley, but its cultivation has greatly decreased in recent years, largely owing to the fact that where it will yield 5 quarters to the acre the newer types of barley will yield 6.

Newer Varieties.—In the main, these fall botanically into the wide-eared group of barleys and are mostly hybrids of the old Spratt, Goldthorpe and Archer families. Although some buyers lump them all together and describe them as "fat" barleys, the newer varieties are so profoundly modified by their environment that they may fall into either the commercially so-called "Goldthorpe" class or the "Chevallier" class, according to the nature of the season, soil and district.

Throughout the Midlands and the west and north-west of England, where barley is sparsely grown and seldom intended for malting, the old types such as the Goldthorpes remain dominant. Where barley is widely grown and intended for malting, from Scotland down the east coast to the south-eastern counties of England and across from Norfolk to Devon, the newer varieties are predominant; in 1925, the most widely grown of any was Plumage Archer. This variety was estimated to form from 70 to 80 per cent. of the barley crop in the Lothians and south-east Scotland, and not less than 60 per cent. in Norfolk, Suffolk and Essex. The proportion remains

high—about 75 per cent.—westward through Hertfordshire, Buckinghamshire, Gloucestershire and Somersetshire to Devonshire.

In Essex, Suffolk and east Norfolk, Spratt Archer is, however, beginning to displace Plumage Archer. It has also been making progress in Huntingdonshire and Rutland and in Devonshire.

Beavans Archer is widely grown in Somersetshire and part of Gloucestershire and constitutes perhaps 25 per cent. of the crop in the south-west. It is also favoured in some parts of Suffolk.

It is not possible to follow all the varieties in detail. Some selected Irish Archers of the old type and Old Danish have been introduced and continue to be grown in east Norfolk. In this and other parts, there have been introduced still more recent varieties, or old varieties passing under new names, and, as always happens, these new varieties show signs of spreading rapidly for a year or two.

(iii) Oats.

Oats may be grouped into two commercial classes—white and coloured—which have, in the main, quite different markets and uses. The coloured oats, in turn, may be sub-divided into black, grey and yellow. The nature of the market influences the type of oat grown in a district, and factors of soil and elevation have also to be taken into account; the most important factor, however, is the time of sowing. Oats, if sown too early in the spring, may be checked at about the 3-leaf stage and become a prey to wireworm, or, if sown late, are liable to be destroyed by frit fly. To avoid the ravages of these pests, which are apparently worst in the south and south-east, oats, to an increasing extent, are being sown in the autumn where the season and system of farming admit of this being done. As yellow oats and the great majority of white oat varieties do not appear capable of standing a hard winter, the introduction of autumn sowing practically means, for most districts, the extended cultivation of black and grey winter varieties.

There are many varieties of black oats but Black Tartarian is perhaps the one most commonly met with in most parts of the country, except Cornwall where an indigenous variety is grown. Of yellow oats, Goldfinder and Golden Rain are the chief varieties outside Wales; Abundance and Victory are the most plentiful and foremost among white spring oats, and White Marvellous perhaps the most common white variety used for winter sowing.

In some parts of Norfolk, more black than white oats are grown, but, over the whole county, not more than 15 per cent. of the oats are winter-sown, and these are practically all black with a very little grey; the bulk of the crop there consists of white spring Abundance, some Victory and a variety called Giant Eliza on the light land. The winter oats are, in the main, consumed on the farm. In Suffolk, winter oats are extensively cultivated and the acreage is increasing, while further south, in Essex, from 30 to 50 per cent. of the crop is winter-sown. Some White Abundance and Marvellous oats are sown in the autumn in the latter district and also an appreciable quantity of grey winters, but, in the main, the winter oats are again black. Of the white spring oats, Victory appears to be the leading variety.

In Hertfordshire, Buckinghamshire and Oxfordshire, the majority of the oats, certainly not less than 60 per cent., are winter-sown. Of these, there is a little white and a little black, but grey winters, suitable for the London and southern markets, predominate.

In the midland counties of Bedford, Huntingdon and Rutland, the bulk of the oats are white, spring Abundance; black, grey and white winters are also favoured, respectively, in these counties. In Nottinghamshire, over 50 per cent. of the oats are black winters, while in Leicestershire, although from 30 to 40 per cent. of the oats are winter-sown, white winters are growing in favour and now represent probably over 60 per cent. of those winter-sown. Towards Warwickshire, on the other hand, only a few white winters are grown

and practically no grey at all, as Birmingham and the Midland markets prefer the all-black oats which, in 1925-6, were at a premium as compared even with white samples; hence, over 60 per cent. of the winter oats and over 30 per cent. of the spring oats are black, although the extent of spring and autumn sowing is, as a rule, fairly even.

In Gloucestershire, in the Vale of Berkeley, from 60 to 70 per cent. of the oats are winter-sown, and, of these, 75 per cent. are black and the remainder grey. On the Cotswolds, however, with oats following roots fed to sheep, at least 70 per cent. of the crop is spring-sown, but 50 per cent. of this is black and probably 25 per cent. grey, since white oats are not considered successful on the hills. Somerset has also a high proportion, probably 75 per cent., of winter-sown oats, but Devonshire, as a whole, does not appear to sow more than 15 or 20 per cent. in the autumn, and, of this, more is grown in east and south Devon than in the north and west. Here, yellow oats of the Golden Rain variety are common, but the white varieties, Victory and Abundance, are the most general; Tartarian and Superb are the chief black varieties. In Cornwall, Old Cornish black oats are common but there is much sowing of mixed "dredge corn."

The area comprising Herefordshire and Monmouthshire is regarded as a good one for seed, but not more than 20 per cent. of the crop is winter-sown. White Abundance constitutes most of the crop and relatively few black oats are grown. In South Wales, although the Vale of Glamorgan grows mostly white oats, over 60 per cent. of the crop to the west of this is black; spring sowing is the rule both here and generally throughout Wales. The native, yellow Welsh oat is long, coarse, tough, does not clip well, and does not stand the winter if autumn-sown. At the Welsh plant-breeding station, hybrids are being produced from the Radnorshire Sprig oat and from the Welsh Strigosa, which promise to be of a better type of grain and as hardy as Grey Winter for autumn sowing. One may, therefore, look for some change in sowing practice in Wales in the near future.

In Anglesey, although white oats constitute the bulk of the crop, the yellow Golden Rain or Goldfinder oats are also popular. In Cheshire, which produces oats of outstanding quality, not more than 20 per cent. of the crop is autumn-sown, but this proportion is said to be increasing. White varieties are preferred for winter sowing, so that very few black oats are grown and, with the exception of a few yellow oats, the crop is mainly white.

In south Lancashire, there is very little winter sowing and, although perhaps 10 per cent. of the crop is black, this is mostly spring-sown. Abundance and Victory account for more than 50 per cent. of the crop, and the proportion of yellow Golden Rain and Goldfinder may be as high as 40 per cent. In the north of Derbyshire, there are very few black and no yellow oats, but in south Derbyshire, where frit fly is bad and the influence of the Midland market is felt, probably as much as 50 per cent. of the oats are black, winter-sown. In north Lancashire, Westmorland and Cumberland, black oats practically disappear, the practice of winter sowing is exceptional and, although some yellow oats are grown, the bulk of the crop appears to be Victory. Abundance is also met with and also appreciable quantities of the Potato oat, the cultivation of which is said to be again increasing.

In Lincolnshire, oats are not extensively cultivated on the heath, as they are apt to grow thin. Throughout the county, the proportion of winter sowing varies from a little over 30 per cent. in some parts, to 75 per cent. in others. White oats for winter sowing are tried in places, but, in the main, the crop consists of 50 per cent. black—chiefly Tartarian for sale in the Midlands—and 50 per cent. white, Abundance being the leading variety.

In Yorkshire, winter oats do not do well on the wolds and not more than 15 per cent. of the oats are winter-sown; these are chiefly black with a very few white. In Northumberland and Durham, 85 per cent. of the crop is white, spring-sown and there is little or no market for black oats.

In Scotland, black oats are found chiefly in Forfarshire, Ayrshire and the

Border counties, while the Lothians and Berwick grow hardly any at all. Winter sowing of oats is exceptional. Probably 30 per cent. of the crop consists of thin-skinned varieties, such as the Potato oat on high ground generally throughout the country, the Sandy oat in the north and the Tam Findlay oat in the west, but at least 60 per cent. of the crop now consists of thick-skinned types such as Victory and Abundance.

(iv) Note on Varieties and Synonyms.

¶ Among all the cereals there is a plethora of varietal names. One variety may have many pseudonyms and the number of reputed varieties is generally increased each year by alleged new stocks which are apparently quite indistinguishable—except perhaps in regard to purity—from the old stock varieties. For a time, these may have a vogue, in many cases of a local character, before becoming merged again into the general type. While the sudden spread of these new varieties may be an index of the farmers' readiness to adopt improvements, it seems as if farmers ought to be protected against paying a higher price for seed which does not differ from the types in common use. There seems room for the appointment of a representative Synonyms Committee for cereals—similar to that already existing for potatoes—which will record the name and characteristics of existing varieties and their synonyms, and register any new varieties put on the market, provided that they are, in fact, distinctive.

APPENDIX B.

NOTE ON METHOD OF DEFINING STANDARD GRADES FOR HOME-GROWN CEREALS.

The precise nature of the factors employed to define standard grades of quality for home-grown grain would require to be jointly considered and agreed on by the various interests concerned in relation to the conditions under which any such system of grading would be expected to operate. As a basis for future discussion, it is suggested that standard grades for home-grown cereals might be drawn up on the following lines:—

Wheat.

- No. 1 *Red* shall be pure red wheat, sound, plump and clean, weighing not less than 62 lb. to the bushel.
- No. 2 *Red* shall be pure red wheat, sound, plump and clean, weighing not less than 60 lb. to the bushel.
- No. 1 *White* shall be pure white, winter wheat, sound, plump and clean, weighing not less than 62 lb. to the bushel.
- No. 2 *White* shall be pure white, winter wheat, sound, plump and clean, weighing not less than 60 lb. to the bushel.
- No. 3 *Wheat* shall include all wheat—red, white or mixed—not suitable for grading either as No. 1 or No. 2, and weighing not less than 58 lb. to the bushel.

Feeding Barley.

- No. 1 shall be sound, clean barley weighing not less than 52 lb. to the bushel.
- No. 2 shall be sound, clean barley weighing not less than 48 lb. to the bushel.

Oats.

No. 1 White shall be pure white oats, sound and clean, weighing not less than 40 lb. to the bushel.

No. 2 White shall be pure white oats, sound and clean, weighing not less than 38 lb. to the bushel.

No. 3 White shall be sound and clean oats, weighing not less than 36 lb. to the bushel.

Black Oats shall contain 95 per cent. of black oats; grades 1, 2 and 3 (Black) shall otherwise be made to correspond with grades 1, 2 and 3 (White).

Mixed Oats.—The grades Nos. 1, 2 and 3 Mixed oats shall correspond in all respects with Nos. 1, 2 and 3 White oats except that they may be coloured or white and black mixed.

The foregoing are merely tentative suggestions and are admittedly open to objection in each case. The barley grades, for instance, have not a great deal to commend them. For each grade, there should be specified tolerances and dockages. It would be a matter for consideration whether the basis test weights should not be altered according to the season; also whether the percentage moisture content should not be assessed on every consignment and a dockage set for each 1 per cent. above 15 per cent. moisture. Further, it might be worth considering whether, in order to discourage the growth of branny wheats, either the percentage flour extract should be estimated by some agreed standard method and a series of dockages assessed in relation thereto, or variety type made an element in the grade definition.



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