



MAGUIRES TOBACCO GROWERS GUIDE

As Recommended by the Tobacco Research Board

Please remember to always read the label before using any chemical



THE GRADING PROCESS

Given the buyer's technical considerations and requirement, five major aspects determine the grade of a leaf. These are:

- **Plant position or group**
- **Style Factor**
- **Colour**
- **Quality or degree of waste**
- **Length**

PLANT POSITION

As already stated, leaves from different plant positions must be kept separate. Separation into groups should present in one season let alone in one run of tobacco.

The following colours should be recognised:

- Pale Lemon - 'E'
- Lemon - 'L'
- Orange - 'O'
- Mahogany – 'R' = light & 'S' = dark

The colour refers to the basic colour of the lamina; blemishes within the lamina will determine the quality of the leaf (an aspect explained below under the heading quality).

STYLE FACTOR

After a decision has been made on the colour of the leaf, the next aspect which determines the grade of a leaf is the style factor. Style refers principally to the texture and maturity of tobacco. Style differences occur as a result of variations in plant growth due to differences experienced in terms of weather conditions, soil nutrient status and cultural practices. Four basic styles are recognized, these being:

- **Ripe/Soft or 'F'/'FA' style** – grades are full coloured, open-grained, ripe and soft natured.
- **The standard style** – refers to tobacco, which is slightly close grained but not slick or flattish in appearance with normal or average maturity and an average colour.
- **Close grained, slick or slately ('K')** – refers to tobacco, which is close grained and immature, having a smooth flat surface and a relatively pale or dull colour becoming distinctly grey in the middle to lower qualities.



EXTRA FACTOR

Having decided on the main style of the leaf a further separation that is based on presence of extra factors is necessary. More than one extra factor may be present, and you may have to decide on the most prevalent. An extra factor describes a superficial but specific side to a grade, which is significant in it.

The following extra factors are recognised:

- **Spot 'A'** - this spot is normally associated with tobacco grown in fast ripening areas. It occurs on the leaf as a small brownish blotch with an off-white centre. Tobacco with spot in excess of 5% of leaf area should be separated into a spot grade.
- **Harsh natured or sun baked 'D'** - this refers to tobacco which is harsh natured and lifeless due to lack of oil caused by dry conditions or baking. Such condition can occur to ripe open grained, standard or close-grained 'K' styles.
- **Scorched 'Q'** - this is tobacco showing a noticeable degree of red caused principally by raising barn temperatures before the removal of excess moisture in the leaf.
- **Greenish 'V'** – any tobacco, any tobacco which as a greenish tinge or cast to it. It is normally referred to as running green, i.e. the green will not be apparent after further maturity.
- **Green 'G'** - any tobacco which contains a set green on the leaf surface. Generally speaking visible green can occur on the whole range of colour, styles and qualities but it would not be practical to suggest a complete duplication of grades for green. Light or running green should at least follow the main colour and style separations where such differences occur. Heavy or fixed green should be graded by colour and by the amount in the leaf. Because greens are the most severely price discounted grades on the market, greater attention should be given to these grades by ensuring firstly that amounts are minimized (that is by checking that no ripe or mature styles are included with immature 'greens'). Secondly that the heavier or cruder green is removed from the lighter green grades. Where green is a problem a solution may be to remove all greens into a few colour and style categories for finer grading later on.
- **Guinea fowl spot 'Y'** - a blemish on tobacco appearing as a speckling of small greenish-black or black dots which are distinctly different from other spot diseases.

These extra factors must be shown to new or inexperienced graders. The graders must be quite clear in their minds what is meant by the various extra factors and able to divide each of the basic colours into the four styles and then the extra factors. So a pile of say lemon coloured leaf may be divided into lemon standard with spot; lemon ripe with spot; or lemon K with V etc. The same may be done in the case of orange coloured leaf, i.e. orange ripe with spot; orange H or orange K green.

QUALITY

Quality or finish is the term used for the degree of blemish, waste or injury. When grading on the farm three qualities are recommended, these being:

- 1 = fine-good
- 2 = fair
- 3 = low to poor



LENGTH

Generally speaking if grading is approached as described above, length should present no difficulty. If however, the variation in length of graded leaf is too great, shorter and longer leaf must be kept separate. The length variation of leaf within a bale of graded tobacco must not exceed 75mm for leaf under 400mm and 125mm for leaf over 400mm length.

To summarise, although each decision that must be made has been dealt with separately the grader's decisions on the grade of a leaf are virtually made simultaneously. When a leaf is picked up for grading the decision is made for example on the following lines:

“orange” ripe with spot, second quality “long”. The leaf will then be allotted to its appropriate position on the grading table. With a little practice the grader will soon gain confidence and his output will increase. The above procedure should be practiced and established before the start of the grading operation and also before grading a fresh run of tobacco.

GRADING OF STRIP AND SCRAP

The grading strip and scrap is very much easier since tolerances are greater. Strips and scrap are usually graded into light, dark and greens.

STRIP

It should be of the same plant position but can contain bordering colours and qualities. Two thirds of the mid-rib and all signs of barn rot, stem rot or mould should be removed. It can contain some large clean scrap of the same type.

SCRAP

Must be clean and free of foreign matter. It should be seized by screening. Scrap of the same appearance from cutters, lugs and primings can be blended together but scrap from thin leaf grades and bodied leaf and tips should be kept separate.

SAMPLE GRADING

The art of good grading is to produce a manageable number of grades easily identifiable as separate grades with a high degree of consistency within each grade. To grade too finely is to invite a problem with too many small lots of different grades. Sample grading is therefore necessary to establish the number of grades required. The sample grading is carried out by the grower with his foreman master blender and check graders before the commencement of the grading operations as well as each time a fresh run of tobacco is encountered. The rough graders are then shown the grades, which are placed in the appropriate place on their tables for reference purposes during grading.



CHECKLIST OF DO'S AND DON'T IN GRADING

DO keep reaping's separate and unless lands are of the same soil type and planted at the same time grade reaping's from different lands separately.

DO keep different VARIETIES and tobacco from different CURING SYSTEMS separate (different varieties should never be graded together but the same tobacco from different curing systems can be graded together).

DO make sure the tie-leaf same as the rest of the bale. Short leaves in the grade can be used for tying and thereby increase uniformity.

DO pay equal attention to lower quality grades since this end of the market has larger prices variability especially between ripe and less mature styles.

DO check greens and if these have been held back to the end of the season, a light regarding of greens which have run and those which have not is advisable.

DO make sure that strip and scrap is free of loose midi-ribs, foreign matter and mould

DO check that the sizes of the butts are between 25mm and 28mm.

DO keep separate leaves differing in colour groups, style qualities and length.

DO NOT mix broken long leaf with short leaf and do not allow the inclusion of bent over stems in the butts. These practices affect the tipping and threshing properties of a grade and apart from the probability of rejection, they spoil presentation and lower the commercial value of a bale.

BAILING AND PRESENTATION

Neatly baled tobacco immediately attracts the buyer's eye. Even before inspecting the tobacco, his interest is aroused. It is very important to create a good impression. Well graded and carefully presented tobacco will encourage the buyer to buy with confidence your tobacco to the best advantage. The use of twine from hessian or jute is prohibited, as are polypropylene twine and monofilament. The recommended space between stitches is 40mm and the use of lock stitches at the ends of the bale and in the centre is essential to avoid the stitching running to the floor when a bale is opened for inspection prior to sale. If a metal bailing box is used be sure to clean the inside surface frequently. Gum from the tobacco deposits on the metal can rub off onto the tie leaves leaving the tobacco looking as if it has been contaminated by grease. Bales so marked can be turned down as damaged. Make sure the bales are not overweight and that the maximum dimensions prescribed are not exceeded.

GROUPING

The importance of correct grouping of tobacco for sale is still not appreciated by all growers. Even if great attention has been paid to the grading aspects, the grower's grouping skill can either make or break a sale. Whilst good grouping normally results in better and more stable prices, bad or erratic grouping inevitably costs the grower money.