

broken by careless handling, especially in dry, hot weather. Threshing should be done in cold, dry weather as it is difficult to separate the seeds from the pod when it is damp.

**Quality of seed.**—The colour of ordinary commercial Red Clover seed is mixed, some seeds being yellow, others purple, and others bright in one end and dark in the other. In some samples the bright colours prevail while in others the dark seeds are most common. It is a popular belief that bright coloured seeds are not fully mature and that samples which contain a large proportion of them are inferior. This, however, is an error. All seeds gathered from any individual plant are of the same general colour. In some plants all the seeds are yellow, in others deep violet, and in others uniformly two-coloured. Bright yellow seeds are just as ripe as dark purple ones. The mixed colour of the ordinary commercial sample therefore does not mean that the seeds are not uniformly ripe. It simply means that it is composed of seeds of different types, each type having its own colour. Although the darker seeds are more popular, the colour should not be taken as an index of value as the most desirable plant types may have pale yellow seeds. Good red clover seed should have a shiny lustre and contain only a small proportion of undeveloped, shrunk seed. The legal weight is sixty pounds per bushel.

### VARIETIES OF RED CLOVER.

Red clover consists of thousands of types, differing in botanical characteristics, biological behaviour and practical value. From a botanical point of view, at least, two main types can be distinguished which might be termed the American and the European. The latter has smooth stems whereas the stems of the former have many outstanding hairs. This hairiness makes the American type somewhat inferior for hay, as it is apt to be dusty. Within either type numerous varieties can be recognized, differing in such practical qualities as yielding power, hardiness, maturity, stocking after cutting and duration. Most varieties are merely geographical ones. Such names as Chinese, English, Swedish, French, South or North Russian Clover do not mean that the varieties are botanically distinct, but simply that the seed is of certain origin and that the plants are adapted to the countries for which they are named.

**Mammoth Clover**, called **Cow Grass** in England, is one of the best known varieties. It has sometimes been called *Trifolium medium* L., but this is not correct. *Trifolium medium* L. being a distinct species, clearly distinguished from Red Clover in many essentials. As indicated by its name, Mammoth clover is a red variety of red. It is more decidedly perennial and has therefore been called *Trifolium pratense* var. *perenne*, or Perennial Red Clover. The stems are long, coarse and generally spreading. The leaves usually lack the white blotch characteristic of common red clover. This cannot, however, be used as a distinguishing mark as common red is often without the spot. Mammoth clover is decidedly later; it blooms ten days to three weeks after common red clover. It grows slowly after mowing and can generally be cut only once in a season. It requires the same soil and climate as common red, but on account of its stronger root system and perennial tendency it is more apt to thrive under adverse conditions. Its coarser growth makes the hay less relished by stock; on the other hand, its greater luxuriance makes it a better soil improver.

It is not possible to separate seed of Mammoth red clover from that of common red.