

WEIGHT PER BUSHEL.

The weight of a measured bushel of emmer or spelt depends largely on the variety and on the way in which it has been threshed; loose kernels, if present, materially increase the weight. Roughly speaking, one may say that emmer generally weighs from 30 to 38 lbs. and spelt from 22 to 30 lbs. per measured bushel.

SPECIAL POINTS OF MERIT.

Both emmer and spelt have been found, so far as tested at the experimental farms, to be as a rule comparatively free from rust. It is also generally believed that they withstand drought very well, and will thrive on soil which is too light to give a good crop of wheat. These most desirable characteristics certainly show that these cereals merit the attention of Canadian farmers in some sections of the country; but they do not, as is sometimes assumed, demonstrate the superiority of emmer and spelt to wheat, oats and barley.

PRINCIPAL VARIETIES OF EMMER AND SPELT.

Most of the varieties mentioned in this bulletin are practically unknown in Canada and do not possess recognized English names. It has been found necessary, therefore, to give suitable names to them. The descriptions and wood cuts will serve to identify the varieties in cases where any of them are already known under other names. The wood cuts are made direct from photographs and show the actual size of the heads, except that in some cases the awns are not represented in their full length. The tests which are being carried on at the Dominion Experimental Farms in regard to the relative productiveness of emmer and spelt do not yet permit the drawing of any definite conclusions; but it appears that Common Emmer (the variety generally grown) will hold its place as one of the best sorts.

Six varieties of emmer and five varieties of spelt are here described. The length of stem, length of head, &c., given in the descriptions refer to the grain as produced at Ottawa. The figures are to be taken as approximate only, and are useful rather in a relative than an absolute sense.

Common Emmer (Fig. 1).—This variety is also known as Ufa Emmer, and commonly but incorrectly called 'speltz' in America. This latter word is a misapplied corruption of the German word 'spelz.' The name White Emmer has also been used for this variety, but White Emmer and Common Emmer, as described in this bulletin, are distinct varieties. Kernels reddish in colour, pointed at both ends, rather large and very hard. (100 kernels weigh about 3 to 3½ grammes.)*

Gluten lacks elasticity.

Heads bearded, about 2 to 3 inches long.

Chaff smooth, pale yellowish, (that is "white" as the term is commonly used.)

Straw thin, but usually sufficiently strong for the weight of the heads. Straw (including heads) about 35 to 50 inches long.

Ripens about mid-season (as compared with wheats.)

The threshed grain usually contains about 78 per cent to 79 per cent of kernel, and 22 per cent to 21 per cent of husk. Loose kernels, if present, will of course materially alter these proportions.

White Emmer.—This variety resembles Common Emmer, but is distinguished from it by having a somewhat larger head and being later in ripening.

Kernels reddish, large, pointed, hard. (100 kernels weigh about 3 grammes.)

Gluten only slightly elastic.

* 100 kernels of Red Fife commonly weigh about 3.1 grammes.