

be neglected unless the grains of corn were at the same time superior in quality or size. The selection of seed-corn was strongly recommended ⁴⁶ in ancient times by Columella and Celsus; and as Virgil says,—

“I’ve seen the largest seeds, tho’ view’d with care,
Degenerate, unless th’ industrious hand
Did yearly cull the largest.”

But whether in ancient times selection was methodically pursued we may well doubt, when we hear how laborious the work has been found by Le Couteur and Hallett. Although the principle of selection is so important, yet the little which man has effected, by incessant efforts ⁴⁷ during thousands of years, in rendering the plants more productive or the grains more nutritious than they were in the time of the old Egyptians, would seem to speak strongly against its efficacy. But we must not forget that at each successive period the state of agriculture and the quantity of manure supplied to the land will have determined the maximum degree of productiveness; for it would be impossible to cultivate a highly productive variety, unless the land contained a sufficient supply of the necessary chemical elements.

We now know that man was sufficiently civilized to cultivate the ground at an immensely remote period; so that wheat might have been improved long ago up to that standard of excellence which was possible under the then existing state of agriculture. One small class of facts supports this view of the slow and gradual improvement of our cereals. In the most ancient lake-habitations of Switzerland, when men employed only flint-tools, the most extensively cultivated wheat was a peculiar kind, with remarkably small ears and grains.⁴⁸ “Whilst the grains of the modern forms are in section from seven to eight millimètres in length, the larger grains from the lake habitations are six, seldom seven, and the smaller ones only four. The ear is thus much narrower,

⁴⁶ Quoted by Le Couteur, p. 16.

⁴⁷ A. De Candolle, ‘Géograph. Bot.,’ p. 932.

⁴⁸ O. Heer, ‘Die Pflanzen der Pfahl-

bauten,’ 1866. The following passage is quoted from Dr. Christ, in ‘Die Fauna der Pfahlbauten, von Dr. Rütimeyer,’ 1861, s. 225.