in Northern Europe, are comparatively more precocious, and need much less heat for maturing their fruit, than the varieties of the same species recently brought from tropical regions. In the reciprocal conversion of summer and winter wheat, barley, and vetches into each other, habit produces a marked effect in the course of a very few generations. The same thing apparently occurs with the varieties of maize, which, when carried from the Southern States of America, or into Germany, soon became accustomed to their new homes. With vine-plants taken to the West Indies from Madeira, which are said to succeed better than plants brought directly from France, we have some degree of acclimatisation in the individual, independently of the production of new varieties by seed.

The common experience of agriculturists is of some value, and they often advise persons to be cautious in trying the productions of one country in another. The ancient agricultural writers of China recommend the preservation and cultivation of the varieties peculiar to each country. During the classical period, Columella wrote, "Vernaculum pecus "peregrino longe præstantius est."[79]

I am aware that the attempt to acclimatise either animals or plants has been called a vain chimera. No doubt the attempt in most cases deserves to be thus called, if made independently of the production of new varieties endowed with a different constitution. With plants propagated by buds, habit rarely produces any effect; it apparently acts only through successive seminal generations. The laurel, bay, laurestinus, &c., and the Jerusalem artichoke, which are propagated by cuttings or tubers, are probably now as tender in England as when first introduced; and this appears to be the case with the potato, which until recently was seldom multiplied by seed. With plants propagated by seed, and with animals, there will be little or no acclimatisation unless the hardier individuals are either intentionally or unconsciously preserved. The kidney-bean has often been advanced as an

[79] For China, *see* 'Mémoire sur les Chinois,' tom. xi., 1786, p. 60. Columella is quoted by Carlier, in 'Journal de Physique,' tom. xxiv., 1784.