

would be entirely deranged, and the whole vegetable kingdom involved in instant decay and rapid extinction.

That this would be the case, may be collected from innumerable indications. Most of our fruit trees, for example, require the year to be of its present length. If the summer and the autumn were much shorter, the fruit could not ripen; if these seasons were much longer, the tree would put forth a fresh suit of blossoms, to be cut down by the winter. Or if the year were twice its present length, a second crop of fruit would probably not be matured, for want, among other things, of an intermediate season of rest and consolidation, such as the winter is. Our forest trees in like manner appear to need all the seasons of our present year for their perfection; the spring, summer, and autumn, for the development of their leaves and consequent formation of their *proper juice*, and of wood from this; and the winter for the hardening and solidifying the substance thus formed.

Most plants, indeed, have some peculiar function adapted to each period of the year, that is of the now existing year. The sap ascends with extraordinary copiousness at two seasons, in the spring and in the autumn, especially the former. The opening of the leaves and the opening of the flowers of the same plants are so constant to their times, (their *appointed* times, as we are naturally led to call them,) that such occurrences might be taken as indications of the times of the year. It has been proposed in this way to select a series of botanical facts which should form a calendar; and this has been termed a *calendar of Flora*. Thus, if we consider the time of putting forth leaves,\* the honeysuckle protrudes them in the month of January; the gooseberry, currant, and elder in the end of February, or beginning of March; the willow, elm, and lime-tree

\* Loudon, *Encyclopædia of Gardening*, 848.