

## SOME COMMON WEEDS.



WHAT is a weed? We may best describe it, perhaps, as a plant growing in the wrong place. A weed is not necessarily ugly, or harmful, or even useless. Many common weeds are very beautiful, and

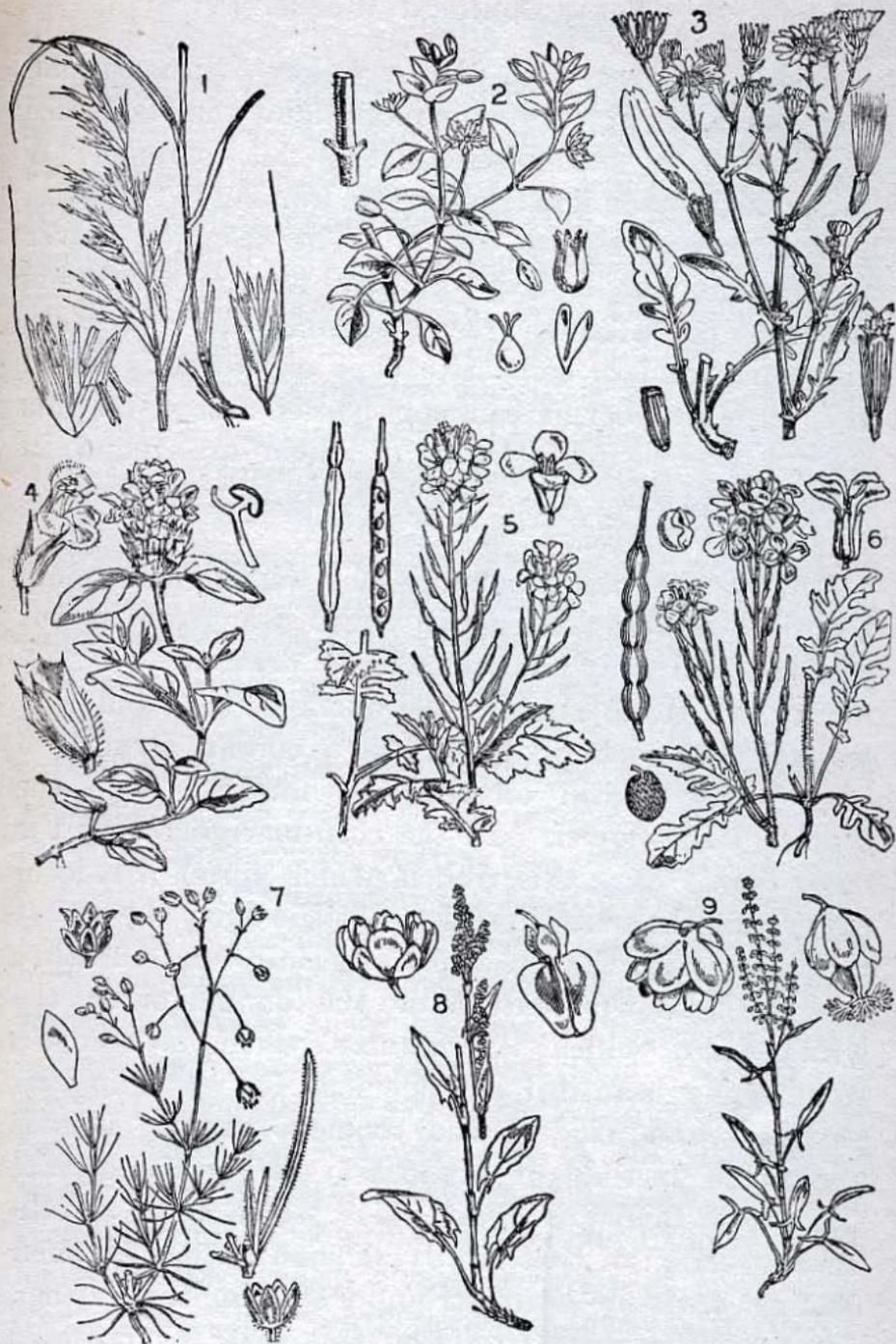
some of them are very useful; but if they are growing where we wish something else to grow, we call them "weeds," and root them out, or try to do so. Grass in our hayfields and meadows is a valuable plant; grass in our flower-borders or turnip-fields is a weed. So when we speak of weeds, we do not mean any special class of plants, but only those which force themselves upon our notice by springing up where we wish something else to grow.

Many of our common weeds are very interesting plants to the botanist. They have to fight for their lives; and the way in which they scatter their seeds, and the power of those seeds to lie dormant for years waiting a chance to grow, are well worth study. It is a war between the farmer and wild nature, and when we look over our fields and pastures in spring and summer we see clearly enough that the farmer is not always the victor. In many a cornfield the oat

crop seems to be merely incidental, while the hardier children of nature flourish in spite of its intrusion.

This is not as it ought to be. Even if they are otherwise harmless, the weeds use up a large part of the plant food in the soil, and they rob the young oats of the necessary light and air. In this way weeds prove an expensive crop to the farmer. It pays him to study their life-history so as to learn how they may be eradicated, and to spend some labour in the task of doing so.

A common pest in the Orkney cornfields is the "runcho" or "runchic," known elsewhere by the name of charlock or wild mustard. Its pale-yellow flowers overtop the growing oats, and their unwelcome gleam makes some fields conspicuous for miles around. The form of the flower shows that the charlock belongs to the same family as the turnip and the cabbage and the fragrant wallflower of our gardens. The flower has four petals, and the cross-like arrangement of its six stamens, four long and two short, has given them their name of *Cruciferae*, or cross-bearers. The seed-vessels, like those of the turnip, are in the form of a long, narrow pod with a partition running down the middle. The seeds are small and hard, and they grow only in a freshly-stirred soil with plenty of light and air. When a field is laid down in grass they make no sign of life, but when it is ploughed for the next crop of oats they spring up once more, and make it as gay as a flower-bed. Two kinds of this plant are found—the one, charlock, of a light yellow colour, common in peaty and clayey ground; and the other, wild mustard, of a deeper yellow, found in sandy soil.



*Some common weeds.*

1. False oat grass. 2. Chickweed. 3. Ragwort. 4. Prunella. 5. Wild mustard (*Brassica Sinapis*). 6. Charlock (*Raphanus Raphanistrum*). 7. Corn spurrey. 8. Sheep's sorrel. 9. Common sorrel.

Another showy weed is the yellow corn-marigold. This handsome flower seems more dainty in its choice of soil, and in some districts it is not common. A glance at the open flower shows its kinship to the "wee, modest, crimson-tipped" daisy. The so-called flower is not one, but a host of tiny flowers or florets growing upon a broad green disc called the receptacle. This compound or composite type of flower is found in a large number of common plants, named on this account *Compositæ*. Many of them are found in Orkney, and they are a very interesting as well as a numerous family.

One of the best known is the dandelion, a more beautiful flower than many which we grow in our gardens, and only its abundance prevents our admiring it. If we examine the florets of the dandelion, we see that each of them has a corolla forming a long yellow ribbon on the side farthest from the centre of the flower. In the corn-marigold only the outer florets have this ribbon, which forms a halo of rays round the central portion. In the daisy these rays are white, with the tips pink, especially underneath.

A well-known feature of the dandelion is the white down which it produces when in seed—a wonderfully beautiful arrangement for spreading its seeds far and wide to find room to grow. This is a common method of broadcast sowing among the *Compositæ* family. The thistles, which form a well-known section of that family, depend largely on their floating seeds in their struggle against the farmer. Some farmers seem to forget this fact, for, crowded in some corner of an old pasture, or in serried ranks by roadside and ditchside, we may see those armed

foes allowed to blossom and send forth thousands of winged seeds to overrun the neighbouring fields, and even the neighbouring farms. A few hours' work with a scythe would prevent the mischief. There might well be laws to prevent the careless spreading of weeds as there are to prevent the spreading of infectious disease among animals.

One of the Compositæ family is a common weed in Orkney pasture fields—the "tirsac" or ragwort. This is a coarse, vigorous plant, with a tough stalk about two feet in height, crowned with a spreading tuft of yellow daisy-shaped flowers. In fields where this weed is allowed to grow and multiply, it soon comes to occupy a large proportion of the whole area, and this means a considerable loss in the grazing value of the pasture.

The large family of the grasses includes some of the plants most useful to the farmer. All the grain crops, such as wheat, barley, and oats, are cultivated grasses, as are also the plants which are used for pasture and for hay. There are some wild grasses, however, which are very persistent and troublesome weeds. Some of these, like couch grass, spread more by creeping underground stems than by seeds. A common grass in Orkney is that known as "swine-beads," from the knotted form of its underground stems. Its common name is false oat grass. It resembles small black oats, but is much taller. Cart-loads of its beaded stems may be gathered from some fields when being prepared for turnips, and by so doing much trouble may be saved.

When a field is laid down in turnips or potatoes, the weeds have a hard struggle for life. Those of

slow growth are checked by the ploughing and grubbing and harrowing, and later by the hoe and the scuffler. Yet there are a few which in a moist season spring up quickly and soon cover the drills. The common spurrey, with its narrow, sticky leaves growing in whorls, and its tiny white flowers which open only in the sun, is perhaps the best known. The chickweed is another common weed in such fields. These, however, if kept down at first by the hoe, are of too feeble growth to injure the crop among which they strive to find a living.

Sheep's sorrel and common sorrel, both commonly known as "sooricks," were more harmful half a century ago than they are at present. Cultivation and the rotation of crops have reduced their quantity, but their enormous power of spreading can be witnessed in a poor, thin, or peaty soil, where the crops, especially grass, are meagre. There they spread, and sometimes with such vigour that they push every other plant aside. Both kinds of sorrel are common. The one with arrow-shaped leaves is called common sorrel; that with spear-shaped leaves, sheep's sorrel. Their leaves, which have a very acid taste, often turn reddish.

Another common and pretty little flower is prunella or self-heal. Whorls of green bracts and violet flowers form a dense, short spike. It grows from four to six inches high, and is to be met with on dry soils, and although fairly common in oats, flourishes best in second year's grass. It is one of the large order of *Labiates*, a group which includes the dead-nettle and the hemp-nettle, and when abundant it is a clear indication of the exhaustion of some ingredients

of the soil—often lime. When fields are brought to a high state of cultivation, or are near enough the seashore to get an abundant supply of sand, it almost disappears; but when they are impoverished, it soon returns.

These are only a few of the weeds which every farmer knows well. They are worth study, for it is only when we know how they grow and spread that we are able to prevent their increase. The cultivation and manuring of the soil and the sowing of seeds are only one side of the farmer's work; he has to remove the wild growth as well as to promote the growth of what he sows. Otherwise his fields will bear two crops at a time, one of nature's sowing and one of his own, and of these two the natural crop is likely to be the more flourishing.

