

It is quite an easy matter to get seeds to germinate and reach the surface in sand, sandy loam, muck, or in soils rich in vegetable matter. But when it is clayey, the soil is liable to bake and crust over and become so hard that the young plants are not able to force their way to the surface. The shrewd gardener knows that "In union there is strength," so he sows thickly on such soils that the vital force of many plants will be able to break the crust. Liberal sowing in such case secures a good stand. The surplus plants must be pulled out. This work is called thinning,

Always sow seeds in freshly stirred soil. This is a good rule for spring, summer, or autumn, and should be strictly followed. Success will be sure as long as there is life in the seed and the least moisture in the soil.

Thorough preparation of the soil before the seed is sown is the first great step toward success. Cultivate your corn before the seed is planted, can be applied to all crops. Use a plow with a jointer so that all litter will be turned under. Harrow, plank and harrow until the surface is perfectly smooth and fine. In other words, use the necessary tools to put the soil in the best possible physical condition.

We like to see the plants in perfectly straight rows, so use some means to get the rows straight in sowing the seed. The wheel at the back of the drill firms the soil as the seed is sown. If it is necessary to sow by hand, make straight marks of the right depth and scatter the seeds by moving the thumb back and forth at the ends of the first two fingers. By using a little care as you move your hand along the row you will be able to sow the seed quite uniformly.

You then establish capillarity by tamping the row with the head of the rake and covering to the right depth by drawing the rake lengthwise of the row. This method leaves an earth mulch above the seeds that are imbedded snugly among soil particles, leaving conditions ideal for growth.

Great care must be exercised in sowing small seeds, such as celery. Their vital force is very small, so they are covered very thinly, and moisture is retained by covering with a sheet of paper or cloth until the young plants appear.

Seeds gradually lose their vitality, some more quickly than others, however. As a rule new seeds germinate more promptly than old ones, so always secure fresh seeds when possible. Some seed dealers sell old stock mixed with the new. We are able to discover the percentage that have germinating vitality, but are not able to decipher the exact age of the seeds by testing them. Seeds retain their vitality about as follows:

Corn, onion, parsnip—one to two years.

Parsley, rhubarb, salsify—two to three years.