



Seeds in Winter

► WE ARE USED to thinking of winter as a time of minimum activity in the plant world; and indeed it is true that far less goes on then than in the warmer months. But we must not fall into the error of accepting it as a time of no business at all in the realm of botany, or we shall fail to see many interesting things.

Not all plants, for instance, sow their seed as soon as they are ripe, like the cottonwood in spring and the dandelion and thistle in summer. Many of them have very canny arrangements, which permit them to hang onto at least part of their seed until well into the winter, and to enlist the aid of the tumultuous winds as agents of dissemination.

Take a look at a jimsonweed or a teasel head. They split partly open when they are ripe, spilling out a share of their seeds at once. But the rest remain within the capsule, shaken out a few at a time as the high winds of late autumn and winter rattle the dry stems. If the seeds fall out during one of the fairly frequent "spells in the weather" when there is a coat of glaze-ice over the snow, the seeds have a good chance of skating many yards, perhaps even miles, before they finally stop. And of course a real blizzard, that can turn fairly heavy sand grains into stinging little missiles, can with equal ease whirl light seeds along.

Again, some trees with winged seeds, like linden and certain ash species, hang onto them like grim fate all through autumn, and do not part with them even to the winds of winter until there has been a protracted and rather severe tug-of-war. The tight-packed balls on sycamores, that bedeck the bare trees for months like Christmas-tree ornaments, take their own time about breaking up and letting the down-winged seeds drift

away. You will sometimes even find thistles with part of their heads still filled with winged seeds, well into the winter. Nor are winter-shedding milkweed pods at all uncommon.

Seeds thus winter-sown are really off to a very favorable start in life. They do not mind the cold: they are all freeze-resistant and have good, solid coats able to stand a good deal of knocking about. If they fall into snow, so much the better. They will eventually settle down to earth as the snow thaws, and by that very token will have the initial supply of water they will need for prompt germination.

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NUTRITION

Here Are Four Signs That Mark A Good Lunch

► FOUR SIGNS of a good lunch, or four foods to look for as a sign that the lunch will supply, as it should, one-third of the day's nourishment were given by Dr. Robert S. Goodhart, technical adviser of the nutrition division of the Office of Defense Health and Welfare Services, at the Congress of Industrial Health sponsored by the American Medical Association in Chicago. These are:

1. Meat or a meat alternate such as cheese, eggs, beans or other legumes, or peanut butter.
2. Two vegetables, one of them green or yellow.
3. Milk as a beverage or in soup (fish chowders or vegetable cream soups) or in dessert.
4. Enriched or whole wheat bread with butter or oleomargarine fortified with vitamin A.

A possible fifth food to look for would be a source of Vitamin C. This should be raw fruit or raw vegetables or salad greens. Don't rely on cooked foods at lunch as a source of vitamin C. Much of the vitamin may be lost in the preparation and cooking.

Cold lunches can be just as good from the nutritional standpoint as hot ones. There is nothing wrong with a properly prepared sandwich, Dr. Goodhart emphasized.

"Two sandwiches made of enriched bread with the right filling and a glass of milk make a darn good lunch," Dr. Goodhart declared.

Lunch should supply at least one-third of the vitamins, minerals, fats, proteins and carbohydrates called for by the national yardstick for good nutrition. In-

dustrial works and plants that have cafeterias, canteens or lunchrooms, however, should aim at making lunch and the mid-shift refreshment supply two-thirds of the day's nourishment, Dr. Goodhart urged. This is particularly important when workers must travel long distances to and from work and have difficulty in getting a good breakfast.

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DOCUMENTATION

Records of Linnaeus Recorded on Microfilm

► INSURANCE against war loss of the world's basic botanical and zoological data has been taken out through the recording on microfilm of all extant specimens in the collections made about 200 years ago by the famous Swedish naturalist, Carolus Linnaeus, together with all his notes, manuscripts and hand-annotated published works now in possession of the Linnean Society of London. Of the several sets of microfilm rolls, two were earmarked for deposit in the United States, one going to the Smithsonian Institution and the other to Harvard University (*Science*, Jan. 29).

Linnaeus instituted the system of naming and describing plants and animals still used by all students of the life sciences, and the first thing that must be done in naming a new species or checking the authenticity of an old one is to consult the Linnean record. For this reason, the existence in this country of two complete sets of everything Linnaeus ever did will be of extreme importance to botanists and zoologists when the normal course of scientific research can be resumed.

The microfilming of the Linnean collections was undertaken by the Linnean Society of London, under a grant from the Carnegie Corporation of New York.

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