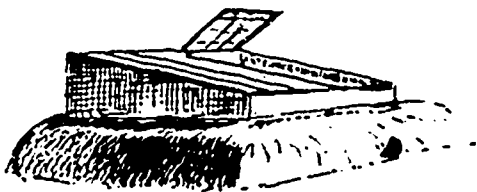


elements in good proportions, to meet general requirements, and at the same time point the way to compounding special mixtures to suit special cases.

FERTILIZER MIXTURES

Horticulture is a branch of "intensive" farming. This means that in looking to secure a maximum production of crop we use an excess of available plant food. The garden soil is to be regarded as a bank in which we seek to have always to our credit a large amount of available funds. This excess of plant food, however, from the considerations in the pre-



A Simple Form of Hotbed

A description of how to make a hotbed was published in the March issue of *The Canadian Horticulturist*.

ceding paragraph, must be a well balanced one. For garden crops in general, including fruits and vegetables, the following may be used, the application ranging from five hundred pounds to fifteen hundred pounds an acre, according to the condition and character of the soil, and thoroughness with which we intend to cultivate and take care of the crop: Nitrate of soda, 200; superphosphate, 300; bone meal, 200, and sulphate of potash, 200 lbs. Mix well just before using and broadcast on the prepared soil in the spring and thoroughly incorporate with the surface soil. An admixture with, say, an equal weight of dry loam will facilitate an equable distribution of the fertilizer. If the soil is sour, poorly drained and deficient in lime, basic slag (an alkaline phosphatic fertilizer) may be substituted for the superphosphate in this formula. If the soil has been well manured for a number of seasons, the nitrate of soda may be reduced to one hundred pounds.

The purchase of the various fertilizer ingredients and home mixing is generally to be advised, as being cheaper than buying a brand of ready made fertilizer and allowing the gardener to more economically use his plant food by modifying the proportions according to the nature of the soil and of the crop to be fertilized. Thus, sandy soils are naturally poorer in potash than clay soils; soils that have for years been liberally dressed with manure will be richer in nitrogen than loams that have been scantily dressed; vegetables and fruits make a large demand on the potash stores of the soil, while cereal crops are very moderate in their potash requirements. These and many similar considerations allow the intelligent man to alter the proportions somewhat in such a formula as we have

given and permit a considerable saving.

If, however, on the score of convenience it is decided to purchase a ready-mixed fertilizer, one having a guaranteed analysis as follows may be chosen in the place of the foregoing: Nitrogen, three and a half to four and a half; available phosphoric acid, seven to nine, and potash, eight to ten per cent.

(To be continued)

Celery for the Home Garden

George Baldwin, Toronto, Ont.

No home garden, no matter how small, is complete without a trench of celery, though from personal observation in the gardens of people whom I am acquainted with, the proper quality and size of celery is not brought out as it should and can be done.

The elements of success in celery growing are many. First and foremost among them is a love for your work. If you do not like your job, you will never be a real success.

By the time this is in print it will be too late for sowing the seed of early celery, but you can procure all the plants you require from local seedsmen at reasonable rates.

Providing you can make room for a three row trench, I would recommend White Plume, Paris Golden and Rose Ribbed Paris. As soon as seedlings have got three leaves, prick them out into more space, giving them about one inch of room each way, keeping them as close to the glass in the hot bed as possible to prevent them getting too long and spindly. Stir the earth frequently with a small pointed stick and when they are about two inches high transplant again, giving three inches of space. About the second or third week of May they will be ready to plant out in the trench.

Early Vegetables

Miss M. J. Dubeau, Warren, Ontario

Why do not our Canadian gardeners grow more early cucumbers? It seems to me that many more might be grown where the climate is not so severe as it is up here in the Nipissing District. Last year I had my first experience in the use of a hotbed. The seed was not put in until the last week in April nevertheless I succeeded in securing lettuce and radish, besides cucumbers. I secured the first cucumbers on June 25th.

From some that I transplanted to the open ground on July 12th I gathered a cucumber which weighed a pound. I was somewhat astonished when our fruit dealers told me they were still handling imported cucumbers which they were selling at ten cents a pound. I also surprised my neighbors by growing some early ripe tomatoes. These I kept pruned severely. They produced ripe tomatoes on August 1st, which is considered early

up here for very few ripe tomatoes have been grown, and none to my knowledge before September when heavy frosts are usually expected.

Planning the Vegetable Garden

W. J. Kerr, Ottawa, Ont.

At this season of the year, the gardener and those fortunate enough to have a garden, should be planning for the future crop. By the time of the appearance of *The Canadian Horticulturist* for April, many will have hot beds made and seed already sown. The preparation and caring for a hot bed is a very interesting part of gardening but where it is not possible for the amateur to make a bed he may arrange with some professional gardener to start his early vegetables, such as cauliflower, cabbage, tomatoes, peppers, melons, cucumbers, asters, verbenas and others. Then, when they are ready to transplant, the amateur may get his plants in the flats in which they have been started and transplant them into cold frames or hot beds.

It is well to secure the best seed obtainable. Cheap seed is usually dear at any price but it does not necessarily follow that the most expensive is the best. I would recommend that the readers of *The Horticulturist* write the seedsmen advertising in this paper, and get their catalogues, and select the varieties of each class of vegetables most suited to their wants. These seeds should be in their hands before planting time and where possible should be tested for germination and if of low vitality should be discarded and fresh seed procured elsewhere.

It is always well to have the land plowed or spaded in the fall so that such vegetables as peas, carrots, onions, parsnips, lettuce and radishes may be sown as early as the land is in nice workable condition. The soil should be raked down to a fine tilth and the seed sown a depth corresponding with the size of the seed. That is, very small seeds should be sown in very shallow trenches, while larger seeds should be sown deeper. It is always well to sow in long rows if possible to permit of the use of the wheel hoe in cultivating, as it materially lessens the labor of cultivation. Frequent and thorough cultivation is desirable to keep up a steady and rapid growth and prevent weeds from robbing the plants of food and moisture. The frequent stirring of the soil about the plants helps preserve the moisture in the soil for the support of the plants during dry weather.

On the first opening of spring it is well to make a general clean up of all rubbish about the garden. Burn it, as you will thus destroy many injurious insects and fungous pests that have hibernated on it, and which await the warm weather to begin their attacks.