

Soils and Crops

By Agronomist.

This Department is for the use of our farm readers who want the advice of an expert on any question regarding soil, seed, crops, etc. If your question is of sufficient general interest, it will be answered through this column. If answer will be mailed to you. Address Agronomist, care of Wilson Publishing Co., Ltd., 73 Adelaide St. W., Toronto.

Turnips, Cabbage and Onions.

The turnip is one of our best root-crops, and one which has become a standby in many families.

The garden turnips, the only kind to be considered here, are divided into the white and yellow-fleshed, or turnip and rutabaga, although properly speaking the latter name belongs alone to the Swedish division of the yellow ones. The yellow-fleshed turnips are grown principally for winter use, the white early ones being used for the all-season and early crops.

The turnip is a gross feeder and demands good soil or a poor crop will be the result. The soil should be well worked so as to be fine and mellow before the planting is done, and the soil in the drills, when they have been made, freed from small clods. For garden use make the drills a foot apart and an inch deep.

Sow the seed in the drills sparingly, dropping them about an inch apart, and cover with fine soil and gently press down over the top of the drills with the back of a hoe or a piece of board. Germination will be hastened if you keep the drills moist, but not soggy, until the young plants appear.

When the plants get to a height of an inch thinning should be done. This is important and depends as to spacing on the kinds planted. Most of the early, flat strap-leaved ones grow to a diameter of three inches under good cultivation, although most persons begin to pick them when they are half an inch smaller. For this reason they should be thinned out to four inches apart in the drills. If you are fond of turnip sauce and like the tops as greens used like spinach, pick the turnips when they are two inches in diameter and thin them out to three inches apart in the drills. This will enable you to grow more in the same space of ground and enjoy the turnips when they are the best. If successional planting is done, you will have early ones coming on until the first ones of the late crop are ready for use.

When sown in the garden in drills, the working of the soil should commence as soon as the thinning is done, as every effort should be made to keep down the weeds and keep the soil loose and the dust mulch on it all the time as the weather approaches. To check turnips during the hot, dry weather of midsummer means pithy or tough roots. When the soil is to be worked by the wheel hoe the drills must be made far enough apart to enable it to be used.

Growing the Cabbage

For the early crop of cabbage the soil should be as rich and mellow as you can make it, and should be of the kind known as "warm," which means one which lies well up and drains quickly after rains and gets the full effect of the sun all day. We increase the warmth of the soil for early cabbage by ridging it—heaping up the soil into ridges a foot high and of the same breadth. It also should be light in texture or the plants will not mature quickly. Growing early cabbage is a "rushing" business.

For late cabbage the soil should be heavier and more retentive of moisture and not so rich as for the early, as the crop has longer to mature, and if rushed is likely to burst open, which spoils its keeping qualities. An ordinary good garden loam which was heavily manured last season, or for an early crop this season, should be good for late cabbage, as the tilth it will have received will improve its texture.

Where it is the intention to use commercial fertilizer to improve the soil for early cabbage, in case manure is not very plentiful, give a dressing along the ridges, to be raked in, of one which analyses 4-7-10; or, if manure was used which was too strawy to contain much ammonia, give a top dressing of nitrate of soda around the plants, when well established. Wood

ashes or muriate of potash is good when the manure is not rich in these ingredients. Apply it as a top dressing around the plants.

The early cabbage plants should be set twenty inches apart in the rows and the rows two feet apart, as the heads and root mass are not so large as are the late ones, which should be set two feet apart in the rows and the rows two feet apart if to be worked with the hoe; or, if to be worked with the wheel-cultivator, make the rows three feet apart.

When setting out the early cabbage have the ridges made at least the day before and properly leveled. Go over them with a trowel or pointed hoe and scoop out a hollow at the right distance apart to set the plants. This is better than making holes with the dibble for plants transplanted from boxes or flats and also provides for those which have been growing on in two-inch pots.

This method of planting will allow the roots to remain in the same relative position they had before being moved. This saves time in maturing. Plants pulled out of boxes and set in holes, straight up and down, and pressed tightly together, will require time to readjust themselves to an altered environment and a disturbed root-mass. There will be no trouble about continuous growth in the case of those young cabbage plants which have been growing on in small pots, as they will not realize they have been moved if the operation is skillfully done, so as not to disturb the mass of white fibrous roots around the ball of soil in the pots. Depot them by inverting the pot, when the plant will come out in the hand when struck against some solid substance.

The Culture of Onions

A loose, sandy loam is best, well filled with humus and dressed with well-rotted manure, dug in the trench. For this purpose poultry droppings, wood ashes and stable manure can be used.

The manner of sowing will depend somewhat on how the garden is to be worked. If with a wheel hoe, the drills may be made a foot to fifteen inches apart. If worked entirely by hand, set the drills eight to ten inches apart. Sow thinly in the drills, so as to run about half an inch apart, as it pays to sow plenty of seed to assure a good stand of bulbs.

When sowing be sure to cover the seeds with fine soil. This will require care, and is very important, as the young seedlings are very tender, and clods, even of small size, are an obstruction to their growth. A good plan is to fill a bucket with fine soil, and go along the drills covering the seeds with soil sifted through the fingers.

Covering of the seeds must be followed by pressing down the soil to insure a good contact with the soil. As soon as the young seedlings show above the ground cultivation should begin. Weeds are the bane of the onion crop. They must be kept out all the time the crop is in the ground, and especially while the onions are very small.

When hoeing by hand, work as closely to the row as you can without disturbing the young seedlings. When they are four to five inches high you should commence to thin them out—before they get crowded. This is important and should be properly done. The way professional onion growers do it is as good as any. They tie burlaps over their knees, straddle the rows and proceed on hands and knees as they thin out the plants.

Thinning of the plants must be done properly. Carelessness at this stage of the game will give poor results. A young onion is very tender, and if care be not had when you attempt to pull them out of the ground they will break off at the junction of the stem with the bulb. If the bulb be allowed to remain in the soil it will crowd the others and make a poor crop.

gives the fuller account (Matt. 9: 35 to 10: 40). They go forth two by two because each can help the other. Thus they cover six districts. Authority over the unclean spirits—Matthew and Luke state that their mission also included healing and preaching.

8. Nothing . . . save a staff only.—This was an emergency call, and they were to be content with the simplest outfit. Usually journeys in the East were most carefully prepared for. But these men were to subsist of the people. No bread—This they could obtain wherever they stopped. No wallet—or haversack, used to carry provisions. No money—Literally, brass or copper, for it would be unnecessary. In their purse The little worn about the waist, in the loose folds of which money was placed.

9. Shod with sandals.—The simplest protection for the feet. Shoes also were worn by Jews—costly shoes, such as were in use among the Babylonians, furnished with upper leather. Put not on two coats—Persons of distinction sometimes wore two tunics. They were to encumber themselves with nothing that would be unsuitable for plain men going about among ordinary folk. In this

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case of the poor the tunic was the only garment.

10. Abide till ye depart thence—in- stead of restlessly changing from house to house they were to be satisfied with the hospitality afforded them. They were not to gad about. "In that same house remain, eating and drinking such things as they give" (Luke 10: 7). They were not to indulge in the usual custom of accepting invitations from the villagers, for it was etiquette for the people to invite a stranger to eat with them, one after another. The heralds of the Master had no time for such palaver.

11. Shake off the dust . . . for a testimony unto them—This is illustrated in the account of Paul and Barnabas at Pisdian Antioch (Acts 13: 51), when the inhabitants had cast them out of the city: "They shook off the dust of their feet against them." This was a symbolical action indicating that they would have no further intercourse with them.

12. Went out, and preached that men should repent.—The burden of their preaching is identical with that of John the Baptist and Jesus. Their chief mission was to reach the inner life to produce change of mind, change of purpose, change of attitude toward life, the forsaking of sin, and turning unto God.

13. They cast out many demons, and anointed with oil many that were sick.—They closely follow all that Jesus did. But we have no record

that Jesus anointed with oil. All his cures, with rare exceptions, were immediate. The only other place in the New Testament where oil is used in healing the sick is in James 5: 14. The use of oil was common as a medicinal specific. Its use was symbolic of supernatural healing.

In verses 14-29 there is given an account of the murder of John the Baptist by Herod. The report of the wonderful works of Jesus caused Herod to believe that John the Baptist, whom he had slain, had risen from the dead and had resumed his preaching. Mark gives the fullest account of what led to John's imprisonment and his execution.

30. Told him all things, whatsoever they had done, and whatsoever they had taught.—The place to which the Twelve returned is not stated. It was probably Capernaum or its neighborhood. They gave a full report both of their teaching and their works. Nothing is said of their success or of the Master's estimate of their labors. It was no doubt a tour of profound importance to his work. They no doubt recounted their varied experiences and received from him the necessary counsel or approval which their report required. We may conjecture that their work was not without its mistakes and blunders, but not without the accompaniment of the power of God. Details of this first evangelizing tour by a group of Christian preachers would be of priceless value to us to-day.

GOOD HEALTH QUESTION BOX

By Andrew F. Currier, M. D.

Dr. Currier will answer all signed letters pertaining to Health. If your question is of general interest it will be answered through these columns; if not it will be answered personally, if stamped, addressed envelope is enclosed. Dr. Currier will not prescribe for individual cases or make diagnoses. Address Dr. Andrew F. Currier, care of Wilson Publishing Co., 73 Adelaide St. West, Toronto.

Acne.

This is a skin disease which is most common and mortifying to young people and it is so persistent that it often brings discouragement to both doctor and patient.

It is by no means limited to young people and when it occurs in the aged it sometimes ends in cancer.

The disease has a number of varieties: one with an oily condition of the scalp extending to the forehead and face; another in which there is dandruff and loss of hair and crusts; and scales on the nose and cheeks; another with hard, horny masses on the face.

In children there are small lumps on the face, containing cheesy material which when removed leave no scar.

Wens on the face and scalp belong to this class of diseases. The common form in young people is that in which the nose, face and forehead are covered with black points or blackheads.

With them there may also be small tumors or pimples on the face and forehead and sometimes on the back, shoulders and chest.

These pimples may be painful and, after discharging their contents, often leave ugly scars.

It is not strange that so disfiguring and troublesome an affection of the skin should make young people very miserable and unhappy.

Sometimes this disease is caused by excessive secretion of the greasy material of the sebaceous glands.

Or there may be an obstruction in the outlet of the sebaceous glands which prevents the secretion from getting out, and so it accumulates and is retained until you squeeze the gland and force it out.

Inflammation may occur in glands that are thus obstructed in their function and you have the same trouble that you would with a boil or an abscess.

It is not easy to say what causes this disease. Doubtless it is some times due to germ influence, but I

do not believe this is the cause in all cases.

What is very noteworthy is that it is often associated with indigestion, with constipation, with the recurring monthly disturbance in women, and with improper habits of various kinds. Those who have it should eat very simple food, avoid pastries and sweets, cheese, nuts, fried greasy food, hot and imperfectly baked bread, and alcohol in all forms.

Exercise is important and will equalize the distribution of the blood in the face.

Bathing is also important, and warm baths are preferable because they are more cleansing than cold.

Applications of very hot water to the face and scalp are often useful in acne.

The diet should consist mainly of milk, eggs, cereals, fresh vegetables and a minimum of meat and fish.

Avoid all food which you have found from experience to be constipating, and use a mild laxative, like castor oil or cascara, regularly and systematically if there is tendency to constipation.

The disease is not a dangerous one and is painful only in occasional instances, but when once acquired it is very apt to stay by one with great persistency.

QUESTIONS AND ANSWERS.

A. D.—My husband was rejected last fall when he tried to enlist, on account of under weight. We were both very much disappointed. How could he increase his weight?

Answer—I am very much interested in every man who desires to enlist, and I am particularly desirous to do anything I can to help him get into the service. If your husband will follow a diet in which cereals (especially oatmeal), milk, eggs and potatoes, form the largest part, and will, also, take a course of gymnastic exercises, preferably at a gymnasium, I think in perhaps three months he will be able to conform to the army regulations in regard to weight. I shall be anxious to know whether this experiment is working successfully.

Horse Sense

In-foal mares may be worked to within two or three days of foaling. Should work cease before that time, rations should be decreased materially. Rations should consist of bran, oats, and other laxative foods. In-foal mares should be provided with box stalls, if possible, sometime before they foal. These stalls should be kept clean and properly disinfected.

As soon after birth as possible the foal's navel should be tied and disinfected with iodine or some other good disinfectant. Careful attention should be given to see that foal's digestive apparatus and kidneys are in working order within twenty-four hours after birth.

Mares, after foaling, should be given water, not too cold and not in too large quantity. The ration for two or three days should be comparatively light and similar in nature to that fed before foaling. After normal conditions seem to have been established the ration may be increased.

There is more starch in wheat than in any other food that we eat.

Interest the children on a stormy Sunday afternoon by taking a sufficient number of goblets or flaring tumblers of uniform size to equal the scale of a certain piece of music. Tune the glasses to the piano by partially filling them with water. Keep time to the music by lightly tapping them with a buttonhook or the metal tip of a lead-pencil. Rock of Ages, written in two flats or key of B, requires but eight glasses.

PREPARING FOR THE SPRING PIGS

By N. A. Clapp.

Notwithstanding the fact that the great law-giver, Moses, taught the children of Israel that swine flesh is unclean and unfit for human food, the modern hog has been so bred, fed and developed that he has challenged the approval of the modern civilized world and stands to-day the most economical meat producer among our domestic animals. His flesh more closely meets the needs of humanity under varying conditions like well arranged enterprises in times of peace and the binding necessities during the periods of war.

At the present time the pork meats are the first to be considered by those who are planning for the needs of the allied armies now in the various army camps in our own country as well as those in active service in Europe. Statisticians are careful to tell us that there is, and is likely to be for some time to come, a shortage in the number of hogs that will be raised and marketed during the coming years. Too many farmers are taking to the plan of selling their grain instead of marketing it at higher prices through the hogs.

Precautions Needed

Conditions the present winter are very unusual and extraordinary. For eight weeks the weather has been severely cold. Under such conditions sows that have been bred for spring litters are pretty likely to spend a good deal of time in the nest and neglect to take the proper amount of exercise to enable them to impart life and vigor to the pigs. Inexperienced pig raisers may think they are doing well by the sows by keeping them confined to the pen during the cold weather, when it is one of the worst things that can be done for them. The sows should have considerable exercise each and every day, even if the weather is cold. To encourage exercise the sows may be compelled to go a considerable distance from the nest for their feed. Such a scheme will give regular exercise and will be productive

of good results. It helps to keep the sows in possession of themselves, prevents stiffness, and forces a healthy circulation of blood throughout their whole system and the foetus will partake of the same healthy condition.

Feed For Brood Sows

While the sows should have a great variety of feeds to enable them to do the double duty of sustaining themselves and furnishing nourishment to the pigs which they are carrying, preference should be given to the rather bulky feeds which are rich in protein. Ground oats, wheat bran and middlings, with a small percentage of corn meal, or whole corn, is better than feeds rich in carbohydrates. It is well to give the grain feeds in the shape of sloppy feeds, and if the weather is severely cold it should be warmed before it is given each time.

The sows should be habituated to eating some forage feeds, such as clover hay, alfalfa and cornstalks to chew on. Such feeds supply the mineral matter needed at this time and aids in bulking the feeds and promoting perfect digestion. This part of the feeding should not be neglected if excellent results are desired.

Make the Sows Comfortable

By all means make the sows comfortable by giving them a dry, warm place in which to sleep and remain during stormy weather. Do not let them be harassed by other kinds of stock or compel them to remain with the boar or other pestering swine. A comfortable, quiet place in which to sleep will help to cultivate an agreeable disposition which will in a great degree be imparted to the pigs.

If exercise is given, a variety of feeds are used which will prevent constipation and comfortable quarters furnished, good results may be expected. If the exercise is not attended to, and laxative feeds not furnished, dead litters and sows eating their pigs at farrowing time may be considered the probable results.



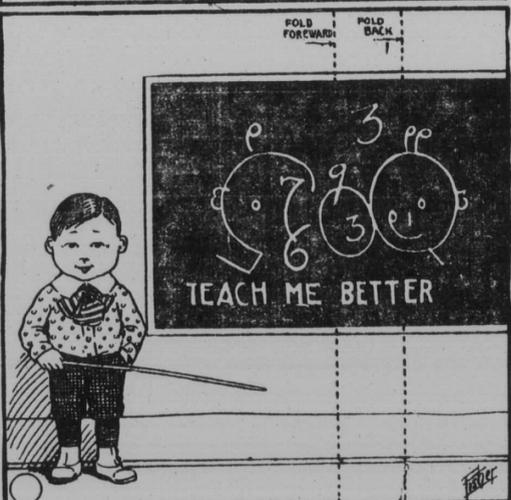
INTERNATIONAL LESSON
MARCH 17.

Lesson XI.—Jesus Sending Forth the Twelve—Mark 6: 7-13. 30
Golden Text, Matt. 10: 8.

Verse 7. He calleth unto him the twelve, and began to send them forth by two and two.—His work in Nazareth being defeated, he leaves the town and begins a teaching tour among the villages. The Twelve have an official position. He has been preparing them for missionary service and now sends them forth. Matthew

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