

Efficient Farming

FERTILIZER HINTS.

Now is the time to consider the spring fertilizer needs on the farm. By placing your order now you will not only be co-operating with your dealer, but you are more likely to get the analysis you want.

When buying fertilizers consider the analysis of fertilizer rather than the brand. A particular analysis may be sold under many brand names. Just because a fertilizer is sold as a "Corn and Wheat Grower," or "Bean and Beet Special," etc., it is no indication that it is best for your particular soil condition. The Ontario Agricultural College is ready at all times to give information regarding the proper fertilization of crops on different types of soil.

Always insist on high analysis fertilizers. A high analysis fertilizer is one containing fourteen or more units of plant food. A low analysis fertilizer contains less than fourteen units. A 1-8-1, containing ten units of plant food, is a low analysis material. A 2-16-2 contains twenty units of plant food and is considered a high analysis fertilizer.

A high analysis fertilizer costs more per ton but less per unit of fertilizing material. Twenty units of plant food contained in one ton of 2-16-2 fertilizer costs \$40.30. Twenty units of plant food contained in two tons of a 1-8-1 fertilizer costs \$58.10. By using a 2-16-2 at half the rate of a 1-8-1, the same amount of plant food will be applied and \$17.80 saved on every ton of 2-16-2 used.

Fertilizers are profitable on most types of soil in Ontario. The points of consideration are: (1) the proper analysis to use; (2) the proper rate of application; (3) the proper method of application; and (4) crops adapted to the soil type.

The use of phosphoric acid is the most important consideration in fertilizing crops on Ontario soils. Both heavy and light types respond to this ingredient. Nitrogen is essential on the lighter types and badly run down heavy types. Potash gives good returns on the lighter types, particularly when used with alfalfa or the clovers.

It is a good practice to top-dress wheat and rye in the spring with sodium nitrate at 60 to 100 pounds per acre, or ammonium sulphate of 40 to 75 pounds per acre just as the plants are emerging from their dormant stage. This practice is particularly good on the lighter types of soil or soils of low fertility. If the soils are alkaline in reaction or have no lime requirement either one may be used. On acid, or sour soils better results will be obtained where sodium nitrate is used.

Acid phosphate at 250 pounds per acre is usually sufficient for oats or barley when seeded alone. If the crops are grown in a rotation with the manure or green manure in the rotation, a 4-12-0 or 2-16-2 will be better. If alfalfa or any of the clovers are seeded with oats or barley, it is advisable to use a fertilizer containing more potash on the lighter type soils, such as an 0-12-6 or 4-8-6.

A complete fertilizer is one containing nitrogen, phosphoric acid and potash. It must contain all three ingredients. A mixed fertilizer does not necessarily mean that it is a complete fertilizer. It may contain only one or two ingredients.

Fertilizers should be used to cut the cost of production and help maintain the fertility of the soil. It costs no more to prepare the seed bed, plant the crop and cultivate a fifty-bushel crop of corn than a twenty-five-bushel crop. Increase the yield per acre and cultivate fewer acres. This will allow more of the farm to be seeded to soil-building legumes.

Leguminous plants such as alfalfa and the clovers have on their roots small bunches of "nodules" containing bacteria. These bacteria can take nitrogen from the air and give it to the plant. As a result the plant is more vigorous and has a higher feeding value. This nitrogen from the air helps to build up poor soil.

If a field has grown the same legume with an abundant supply of nodules for three or four years then the field is, in all probability, inoculated with the right kind of bacteria for this particular crop. If it is necessary to bring bacteria from an outside source, a nearby field which is known to be inoculated is a satisfactory source. Distribute this soil over 200 to 300 pounds per acre. Make this distribution before seeding, on a cloudy day, and work the soil in immediately. If such soil is not available, inoculate with pure cultures, which you can get, with directions, from any seed store.

There are several strains of these bacteria. One strain will infect both alfalfa and sweet clover; another infects the common clovers, such as red, alsike, mammoth and white. Separate strains may also be had for field and garden beans, soybeans, field and garden peas, cow-peas, sweet peas and vetch. A field inoculated with sweet clover will also be inoculated for alfalfa and in the same manner a field inoculated for one of the common clovers will be inoculated for all the various common clovers.

Inoculation of Legumes.

Mr. Wm. Hartry, a director of the Ontario Horticultural Association, addressing the annual meeting held in Toronto in January, described his method of making a new rose bed. The space to be worked was 5 1/2 feet wide and 12 1/2 feet long. The sod was first removed and laid on one side. The good top soil was taken out and placed at the other side. The hard subsoil beneath was removed to a depth of eighteen inches and wheeled away. A tile drain was laid in the bottom and connected with one that ran through the garden. Next, the sod that had been taken from the top was filled in and this was covered with several inches of well rotted stable manure. The excavation was then filled to the top and above it, layer upon layer of good soil and manure. This work was all done before the roses arrived. The planting stock of twenty-eight roses arrived in the forenoon and were immediately plunged into a tank of water, where they were left until sunset when they were left until sunset for planting. The plants were put in about twenty inches apart. The varieties planted were Premier, Columbia, Sunburst, and American Beauty, all of which did well. The following year the planting was extended to forty-eight plants, the new varieties added being Dunlop, Madame Butterfly and Hoosier Beauty.—Ont. Hort. Assn.

The Rose Bed.

Use enough potassium permanganate in the drinking water to turn it the color of weak coffee. Give one-half grain of sulpho-carbolic compound in hot mash, for each bird, two or three times daily. You can secure these tablets from any druggist, who keeps them for use of human physicians.—Dr. George H. Conn.

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Bedtime Stories

Jokes for Two.

Robert had been playing April-fool jokes all the morning. At last even he was tired.

"Will you help me put a new cover on my kite?" he asked Miriam, his sister.

Miriam shook her head. She thought Robert deserved punishment.

"All right, I didn't want you to anyway; April fool!" he cried and ran out to play with the new boys across the street.

Miriam had played with Robert ever since breakfast and had not been cross once when he "fooled" her. Now she thought it was most unkind of him to go off and play with a boy he had never seen until yesterday.

"I don't care!" she said to herself, and sat down by the window to think. She could see the boys playing under the trees. They seemed to be having such a good time! The new boy had brought out his radio set to show to Robert. Miriam felt like crying. Sometimes boys were very mean.

By and by Miriam smiled. "H'm! I guess Robert Kenyon is not the only one that can play an April-fool joke," she said.

Miriam did not tell anyone about her joke, and during luncheon no one would ever have guessed that she had one in mind. But as soon as Robert had gone back to play with his new friend she busily set to work with the scissors and paste pot and a roll of paper and some string.

She worked steadily, and just when she had finished her little joke and put it away she heard Robert's whistle.

He opened the door of the closet where he and Miriam kept their play clothes and games and things. Since he was talking very fast about the new boy, he did not notice that Miriam was eavesdropping. Robert hung up his cap and started to close the door. Then far back in the corner he saw something that made him stare. He caught it up and brought it out to the light.

"April fool!" Miriam called, dancing round her brother. "April fool!"

Robert's eyes grew big and a broad smile spread over his face as he stood looking at the object in his hand. It was his old kite, with a new glossy covering of tan and blue, with L.S., which stood for Lincoln School, in tall silver letters in the centre of the blue, and a beautifully knotted tail that Robert knew at a glance was "just right."

He grinned sheepishly at Miriam. "I guess I was kind of mean, sis," he said. "But it was great of you to stay in alone all afternoon and mend that old kite!"

"I didn't mind," she answered, and her eyes were bright and shining. "Last tag!" she cried and darted away to the kitchen.—Nellie Josephine Phipps, in Youth's Companion.

Uncle Si says he likes to have company for meals well enough, but he does hate to keep passing things, and they never seem to ask for what they want.

Improper handling of farm manure is probably causing more plantfood to pass into the air as ammonia or into the creeks as seepage than ever reaches the field.

An April Fool Party.

Use the following rhyme for your invitations:
On April First just try for once
To be a really, truly dunce,
And come prepared to do some stunts,
For good news waits for her (or him) who hunts.

Provide each guest with a bag of beans and then explain that everything is to be done with the left hand. Guests shake hands with the left hand, pass to the left and eat with the left hand. A bean is thrown into an inverted dunce cap every time this rule is broken. After refreshments are served, guests should report the number of beans they have left and the prize should be awarded to the person having the smallest number, a decision which will fool everybody. The person having the largest number of beans should be required to do some foolish stunt, for he had not been sufficiently "foolish" to get into the spirit of the evening.

Ask each guest to bring some article (well wrapped and disguised) to be used for a "parcel pass." Seat the guests in a circle, each holding a parcel which has been numbered, then have a lively tune played upon a piano or talking-machine and instruct the players to pass the parcels as rapidly as possible, round and round the circle until the music stops. The person in charge calls out a number and the person holding the parcel having the number which is called becomes the owner of that parcel. The music and the passing of the parcels is resumed and repeated until all the parcels find owners. The contents of the packages should be as ludicrous as possible—a shirt-waist box containing a dish-cloth and a jeweler's box containing a yeast-cake, are good examples.

Serve any refreshments preferred, but mix your April Fool dishes with the other articles of food. Cotton doughnuts, individual pies filled with sawdust, and chocolate creams made of confectioners' sugar mildly flavored with pepper, will fill your guests with apprehension concerning the other refreshments.

Home-Made Yeast for Poultry.

Yeast is becoming an important factor in the growth of poultry and increased egg production. Poultrymen may make their own at a cost less than the commercial product. Place one quart of hops in about two and one-half quarts of water, and boil for ten minutes. Then strain and pour the liquid over one quart of wheat flour. As soon as this mixture reaches a temperature of 100 deg. F. (milk warm), add a cake of commercial yeast, and let it ferment for two days. Keep in a warm place, as a chill will destroy it. After it has fermented, stir in five pounds of cornmeal, and let it stand for three or four hours to rise. Then remove from the pan and place on newspapers to dry. When dried it is ready to be fed.

Care of Grease.

The cans or boxes in which axle or cup greases or lubricating oils come packed, usually become more or less greasy or oily out the outside. In time, the shelf, bench or floor where they are kept becomes grease-soaked. This is not only unsightly and messy, but also increases fire hazards. To avoid this, cover the shelf or floor with a piece of tin, galvanized iron, zinc, or other smooth sheet metal. Then, if this is wiped off occasionally with a rag or a piece of waste, it becomes easy instead of hard to keep clean.

Four Bee Essentials.

These four things are essential to profitable honey production:
1. Suitable weather for the bees to work in when the season of the main honey flow is on.
2. Honey-producing plants secreting nectar in abundance.
3. A strong force of worker bees—75,000 to 100,000—at the beginning of the honey flow.
4. Colonies that devote all their energies to gathering nectar and storing honey, rather than to swarming. The stinging instinct must outweigh the swarming instinct.

If you wanted a surprise, plant a plat of certified seed potatoes alongside a plat of the common stock, as we did last year. We never saw potato plants grow so fast or so well blossomed as the certified seed, while the common stock was at least two weeks behind, though planted the same week. There were no missing hills or leaf-curl on the certified plants, while the stand of the other plat was irregular and showed a slight trace of disease. Mrs. C. H. Estey.

Inside Dope.

"Say, why's the doc pumping out that fellow he thinks poisoned himself?"

"Trying to get the inside dope on his case."

Fair or Foul.

'Tis not the Victory you've won;
'Tis not great Wealth nor Fame;
What really counts in Life, my son,
Is how you played the game!

When all your mortal days are done
And praise is due, or blame,
The Great Umpire knows, my son,
Just how you played the game!

It is not altogether what a hen eats that makes eggs and flesh, but what she digests and assimilates.

Ontario Breed Better Livestock

Send us the name of a Bank or Loan Company that won't assist in Purchasing a good Pure Bred Sire.

BUY BETTER BULLS

A Farm Book-keeper for 10 Cents

EVERY farmer ought to know what his farm is making for him and which departments, if any, are not paying. To do this end he needs a simple record of receipts and expenditures, along with yearly inventories of land and buildings, stock, machinery, feed and supplies.

The Department of Agriculture at Ottawa offers, for 10 cents, a "Farmer's Account Book." Only a few entries from time to time are needed. Send 10 cents for the Account Book and receive also "Seasonable Hints" and our latest list of free publications. Fill in and return slip, post free, to:

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Mangels Have a "Sweet" Tooth.

I once heard a farmer-neighbor say that mangels are the hardest thing to grow on the farm. I think I know why—in the years I have known him man I have never seen him spread a pound of lime. You can't grow mangels without lime any more than you can clover. Lime and manure, good seed and cultivation are the combination needed for mangels. When I drive around and see a field of stunted, stringy-looking mangels struggling to make growth, I say to myself—"Acidosis."

There's no dark secret about growing mangels provided you furnish them with enough manure to grow on and lime to keep them sweet. I limed my plot last fall and it was heavily manured during the winter. Fall spreading is best for lime. It works down and in, with the alternate freezes and thaws. The first time I put in mangels, however, I limed in the spring, and certainly grew some big roots. Pretty near scared me, they grew so big and fast—like a red-headed boy raised on raw milk and spinach. I didn't know then that, unlike the iceberg, the mangel's bulk grows mainly above the surface.

I grow red mangels, though I understand there is no difference in feed value between red and yellow varieties. I drill the seed with my garden seeder, setting the index to feed not too thickly. They can be thinned after the stand is definitely established to about a foot apart. I put mine in early enough to assure a full season's growth. Keep them cultivated, and they will certainly produce.

—H. A. B.

Turning to the Hemlock.

Eastern hemlock was valueless as a lumber tree twenty years ago, and only the bark was used, but it is now a very valuable timber.

Labels

Labels for bottles, boxes and cans. Write for samples and prices. Labels Manufacturing Co., Ltd., Ottawa, Ont.

Seed Potatoes

New Brunswick Crown and Government Certified. Irish Cobblers and Green Mountains. For sale at the following prices: Peck, 50c. Bustel, \$1.60. Bag, 90 lbs., \$2.25. Special price in lots of 5 bags or more. No charge for bags or packages. Ask for Ontario Crown, at about 20 per cent. less. You will have to order early as quantity is limited. Cash with order.

H. W. DAWSON
P.O. Box 28 Brampton, Ont.

Seed Potatoes

Labels for bottles, boxes and cans. Write for samples and prices. Labels Manufacturing Co., Ltd., Ottawa, Ont.

Simonds Saws

Use "Simonds" Greenback Saws. They cut through anything. Write for samples and prices. Simonds Canada Saw Co. Limited, Vancouver, Montreal, St. John, N.S.

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TORNADO

Illinois, Ind. of Devas

A despatch Estimates made the maximum at least 5,000 in which swept the Ohio, Indiana, Mo. Ohio late on W. Each new d growing toll. T experienced by half a century reporting death to as high as

Southern Illinois destruction alone more than counted, and estimated as high fort reports a 1 to 350, and the ber more than 1 ham were virt tornado, with 3 former and 100

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LORD CURR AW

Late Marquis Prominent tish G

A despatch British Govern President of the day Friday m Death came a

the four, and early detail, not solitary, lower

SOUTHERN WORST

A despatch from Washington, D.C., says that the Southern Railway has been closed for several days in the South. The cause is a severe storm which has done much damage to the line. The storm has also done much damage to the crops in the South. The Southern Railway has been closed for several days in the South. The cause is a severe storm which has done much damage to the line. The storm has also done much damage to the crops in the South.