By Agronomist

This Department is for the use of our farm readers who want the advice ef 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 stamped and addressed envelope is enclosed with your letter, a complete enswer will be mailed to you. Address Agronomist, care of Wilson Publishing Co., Ltd., 73 Adelalde St. W. Toronto.

When to Spray and What For.

All the spray mixtures it is possible to use on a tree will not do much good unless the right applica-These directions will tell just when to spray and what for.

orchard is infested with insects and disease.

First spray: Apply just after leaf or commercial lime-sulphur testing 32 deg. or 33 deg. Baume diluted 1 to 40. (See next article for directions for making Bordeaux mixture.) scab, curculio and canker-worm.

soms fall use same materials as for moderately dry soil, well drained first spray. This is for control of even during rainy weather. the codling-moth, and must be appower sprayer is best.

erials as for first spray. If blotch same time. This is the reason alfalfa inion Department of Agriculture has clover, alfalfa or some other legume is bad in the orchard, use Bordeaux does better in well-drained soils. mixture 4-6-50 instead of lime-sul- Although drainage is a big essen- "The Apple Bud-Moths and Their

the third spray. Use same material during the winter, or if the water of the life-histories of the four des- after the plants begin to appear. as for first spray. This is for con- is moving in summer.

after fourth spray.

Pears and Quinces need the same out it .-general treatment as apples, except should not be quite so strong.

each fifty gallons of spray material. kept in health and vigor. This is for control of brown rot and In addition to making the soil a

petals fall.

treatment as plums.

How to Make Spray Mixtures.

partly filled with water.

Slake the lime in a tub and strain | As ground limestone is harmless, the milk of lime into another tub or a person may use as much of it as barrel. Pour the dissolved copper he wishes. It is pleasant to work sulphate and the milk of lime into with and doesn't burn like caustic the sprayer tank, or into a supply lime when it gets on the skin, nor tank, at the same time. Add enough does it cake together if it happens water to make fifty gallons. .

pounds of lime instead of four.

fifty gallons of water. Place the lime in a barrel and add almost enough water to cover the lime. When the lime begins to slake add the sulphur, tions are made at the right time. by mixing it with water. Stir the cooking mixture and add water as needed to keep it in the form of a Spraying Apples.-Four or five thick paste, which should become sprayings are necessary, depending thinner as the mixture cooks. In ten or fifteen minutes the heat from the slaking lime will cook the mixture which becomes more mature is fed appear in the bulletin. These show buds burst but before blossoms open. is the standard summer spray for added to make fifty gallons .. This peaches.

How To Get a Stand of Alfalfa. Getting a stand of alfalfa is most- before the hogs. Add two pounds of lead-arsenate to ly a question of soil. If the soil is each fifty gallons of the spray mix- right your efforts will be crowned will be found to be one of the most bulletin giving scientific descriptions, ture. This spray is for control of with success. Generally the problem profitable departments of the farm, etc., has also been published. This is to make alfalfa succeed after you Second spray: Just after the blos- get the stand. Alfalfa requires a Apple Bud-Moths and Their Control omic workers. Enquiries regarding

plied with a great deal of force. A for many days the alfalfa will be- the caterpillars of the bud-moths are Ont." come yellow and unthrifty. It needs probably the cause of more loss than Third spray: Two or three weeks moisture, but it likes to have the all the other insects combined. The Three bushels of oats an acrelater than second spray. Same mat- moisture in the air and soil at the Entomological Branch of the Dom- and be sure to sow red clover, sweet

phur; add two pounds of lead-arsen- tial in successful alfalfa growing, an Control in Nova Scotia," by G. E. ate to fifty gallons of spray material. occasional overflow of a creek or Sanders and A. G. Dustan. This bul- with a twenty per cent. solution of Fourth spray: Nine weeks after river will do no harm if it comes letin of 24 pages gives an account iron sulphate as soon as possible

live long, without bacteria helping control of these insects discusses re- all. Fifth spray: This is necessary only it. It has become used to them and where blotch, black rot, bitter rot depends upon them. Alfalfa-promotand other fungus diseases are ing bacteria will not live in all soils. troublesome. Use same materials as Carbonate of lime makes the alfalfa for third spray and apply two weeks or nitrifying bacteria thrive. They do not seem to be able to live with-

While it is not known definitely that when lime-sulphur is used_it why carbonate of lime makes the nitrifying bacteria do so well, many Spraying Plums .- A dormant alfalfa growers advance the theory spray of lime-sulphur is applied for that alfalfa plants give off certain San Jose scale any time during the substances which are poisonous to dormant season. During the grow- the plant. That is, the alfalfa roots ing season several sprays are nec- give off a poison that is injurious to itself and to other alfalfa roots. First spray: Just before blossoms When there is much carbonate of open apply Bordeaux mixture 4-4-50. lime in the soil this poison is in some Add two pounds of lead-arsenate to way neutralized and the alfalfa is

healthful home for good and useful Second spray: Just after blossoms bacteria, carbonate of lime confall use same materials as for first serves humus and stops a waste of nitrogen. When plants decay in the Third spray: Same materials as soils nitric acid is formed. This is eventually prove to be his good for- capped in life's race. In time, the it can be supplied to them in hoppers second spray, three weeks after soluble and, unless taken up by the plants, soon leaches away. If there Cherries need the same general is a supply of lime present, the nitric it. acid unites with the lime to form calcium nitrate. This locks up the of the question to start him in the best in reading for another person's their own green food. Fresh water, nitrogen and holds it.

To make Bordeaux mixture take the soil, it is best to put it near the sary as is an understanding of the that might be given, but in so brief ion helps to stimulate young chicks. four pounds of copper sulphate, four surface. It ought to be mixed as child, and who should understand a an article only an idea of the method pounds of quicklime fifty gallons of perfectly as possible with the soil, child better than his own mother? can be presented. Every mother plenty of dry mash before them at water. Dissolve the copper sulphate as it is not effective when left in by putting it in a coarse cloth bag lumps. This is because the lime is and suspending the bag in a barrel not in contact with enough of the soil particles. .

to get wet. One may put it on the . For Bordeaux 4-6-50 use six soil at any time. It may be put on with manure, as it does not burn out To make self-boiled lime-sulphur the humus. Soil acids attack the 8-8-50 referred to in the first article, particles of limestone and are neuuse eight pounds of unslaked lime, tralized, but the lime itself does no means absolutely nothing to a little And he is far more likely to respond When wheat can be used for feeding

The person who feeds swine for

the purpose of producing pork should bluegroup pasture make consilie as schoolroom education in which we what particular thing is most likely feed that the broilers will consume. that will gain weight rapidly and possess the characteristics of the fat hog type which are a short and broad face, wide head, ears well apart, full jowl, short legs, wide and deep body with good full spring of rib. If the farmer is feeding bacon hogs he should look for a little less width about the head and face and feeding for pigs farrowed in April part of the play. for good length and depth of body and are ready for pasture in May is: Even a tiny child can learn the she was still a baby and gradually ing poultry at a profit requires careat the same time avoiding coarse- The previous fall a field is sown to names of colors, learn them under- drew her out until she could speak. ful management and good vigorous

lard or bacon hogs will depend large- turned out; one acre of this supplies train the eye and the powers of ob- and is ahead of the always normal ly on the location of his farm. When- 100 pigs and their mothers for about servation. If he knows, for example, child in every way. ever possible home grown feedstuffs, a month; also a ration of corn meal the color red, and mother some day | The three-year-old brother of this ruined by turning the stock on them should be used, because feeding pur- tankage or skim-milk is fed them. writes it on the blackboard in red little girl can write on the type- too early in the spring. Wait until chased feeds is not always conducive. About the first of June the pigs are chalk it will take him only a little writer. While this may seem pre- the ground is firm and the grass well to profit. If the farm grows an weaned and placed on clover or alfal- while to recognize the written word cocious, still is it any more so than started. Mark the stock before abundance of corn and clover or al- fa, which furnishes green feed for as readily as he does the color itself. when a child of the same age can turning out to pasture. falfa it will be more profitable to the next five or six weeks. About If she helps him when he is playing spell words with his alphabet blocks? Lime does not take the place of grow the lard type, while on the the 15th of July they are turned in with his blocks it will soon be an It is simply a different method of other fertilizers or manures, but other hand, if the main feeds grown a pasture of field peas and oats, thus interesting part of his play to spell playing very nearly the same game, supplements them. When the use of are barley, peas, oats, etc., having supplying part of the grain ration; the word red.

a narrower nutritive value, bacon the acreage is larger because the Games will teach the numbers. Wright knows every color and can and no_adequate provision is_made hogs can often be raised to a better pigs are larger. Green sweet corn, Let a child play with a box of tooth- read many words, while his big sis- for maintaining the supply of other advantage.

shelter, maintenance and labor are least, while grains cheapest and instruction were it possible to em- often appeal to such a child more milk and corn meal mixed into a greatest. Of these the greater num- ploy it under present conditions in than anything else. But it will rest sloppy mash. The main point is to ber is fattened on pasture. It is the schools. However, it is not with the mother-teacher as ascertain reduce the exercise and increase the bluegrass pasture make equally as are interested just now. great gains as pigs fed in dry lot The work and play method is really raising of the curtain that obscures to keep them developing rapidly and

rye or winter vetch, furnishing a standingly as he looks at a ribbon, She recovered fully the power of Whether a hog raiser should feed good crop for pigs when they are at the grass, at the sky. This will speech before she was four years old

hog the corn down, thus saving a ple growers in eastern Canada.

Kissable Child

Nobody Else Will Do

songs as they come out

Ideal Music Publishing Co.,

The feeding of hogs for market Ottawa. A technical edition of the

in Nova Scotia.

The apple is attacked by a number ed to "The Dominion Entomologist, just issued Bulletin No. 16 entitled with it.

shortly after the green sweet corn sults obtained from spraying experiis ready to be fed. This is also fed ments, following which definite conin the roasting ear stage and when trol measures are recommended. bottom of the stalks become woody Useful information is also included only the top portion is used. The on parasitic insects and other naturpigs are kept on pasture, and corn al enemies. Fourteen illustrations until fall or early winter, when they injured blossoms and fruit, various are ready for market. When pos- stages of the insects, etc. This pubsible it is a very profitable plan to lication will be of much value to apgreat deal of labor. In this case can be obtained free of charge on a self feeder with tankage should be application to the Publications Branch, Department of Agriculture,

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insects in general should be address-If the soil becomes water-logged of different insects. In Nova Scotia Department of Agriculture, Ottawa,

Mustard plants should be sprayed tructive bud-moths which occur in This makes them homesick enough to trol of scab, brown rot and second Alfalfa will not thrive, nor even that province. The chapter on the die and not hurt the small grain at

WHEN CHILDREN CANNOT ATTEND SCHOOL

By JANET THOMAS ORMSTON.

bility makes it impossible for him; the natural colors are of great eduperhaps mental deficiency debars cational value. Children learn the him from entering classes with other names of these because they want to children, or, if he is a very little and they are eager to have stories child, it may be that he is too far, teld about them. from the school to walk there and . The reading of stories and verse first week, about five times each day. back. Whatever the cause, the child to children and the telling of stories Then fine chick scratch feed can be who does not attend school will be is one of the leading helps in this substituted and used until the chicks seriously handicapped all through method of education. There is no are large enough for whole wheat, life unless an adequate substitute for limit to what a taste for right litera- cracked corn, etc. Plenty of sour the school education is provided. In ture may do for a child, and especial- milk induces a rapid growth. Little that case his present misfortune may ly for one who is any way handi- chicks cannot eat too much bran and tune, provided the home instruction mother may have the children read from the first day. Green food is

paths of learning themselves. But pleasure. Since the lime naturally sinks in advanced knowledge is not so neces- There are a hundred suggestions stormy days a little fine chopped on-Nor does it take a great amount of who takes up the work will find sugtime. Once a mother gets well start- gestions continually coming to her ed in the teaching of her child she and she will herself develop, al- lay at their normal time, which will not find it difficult; very likely though in a different way, almost as should be about six months for the she will become fascinated with the rapidly as does the child. work. It is a wonderful thing to A word about the child who seems watch the daily mental development mentally deficient. In too many of a child. The pity of it is that so cases no effort is made to educate the cockerels as soon as the sexes few mothers have the best oppor- such a child. This is a culpable mistunity for observing it.

the mother who knows nothing about and exercise in the hope of developteaching is the method to employ. ing it. Very often a child "not bright" The old a, b, c method has been al- can be drawn out little by little until most descarded, because a, b, c finally he ceases to be subnormal. eight pounds of flowers of sulphur, harm, no matter how much is used. child. The "work and play" method to any such efforts right in the home shows the best results according to circle than he is if placed among wheat to one part corn in the scratch mothers who have tried it. It would strangers. Colors and bright pic- feed. doubtless be best also for schoolroom tures of animals, birds and flowers

thereby pay a profit to its owner. If on a balanced ration. Clover or al- nothing but guided play. All of the the mind. Something will probably evenly from the day they are hatchfalfa give better returns than blue- child's amusement is made an aid do it and infinite patience must be ed. Broilers cannot be half starved type of hog he should seek in ani- grass or timothy when corn is fed in to his education. He is not told that exercised until that something is mals for fattening those which conjunction. Corn alone on abund- he is learning things, no set task found. ant clover pasture forms an ideal is given him. He absorbs knowledge It is interesting and inspirational finishing them properly on a ten-day ration, excelling a balanced ration by the use of the games which he to know what mothers have actually period of fattening. Twenty to thirty of corn and tankage or middlings in is led to play, by the answered ques- and easily accomplished by this me- per cent. of beef scrap has been used rapidity of gains and excelling all tion, by the suggestion here and thod. A little girl, now five years successfully in some fattening raother rations on pasture when rate there, as a sponge absorbs water, old, had lost the power of speech tions. Usually broilers can be sold and economy of gains are considered. The instruction that goes with the through illness when she was a wee with very little fattening if they A satisfactory system of pasture games all seems incidental and a baby. Her mother began teaching her have been well fed from the hatching

ing the summer the requirements for or no need of-corn meal ration, until come acquainted with the figure and these children

There is scarcely a district in the the word two. He learns what onecountry that has not some child, or half is when he divides his apple children who, for some reason; or evenly with his playmate and he will other cannot attend the public school. soon understand the figure one-half. It may be that some physical disa- Pictures of birds and animals in

is made all that it is possible to make to her for her entertainment, not in important and can be given in the the recitation of a lesson. They will form of sprouted outs or cut clover Mothers may feel that it is out forget themselves and do their very until the birds can range and collect

take. If he had an atrophied muscle should not be compelled to range The thing that will bother most it would surely be given nourishment

by the work-and-play method while time and are in good flesh. Fatten-

is also fed at this time but not be- picks and have him sort them into ter of ten has been writing verse fertilizers and organic matter, crop date of invoice and 5% allowed is also fed at this time but not be- picks and have him sort them into ter of ten has been writing verse fertilizers and organic matter, crop date of invoice. By far the greatest number of fore it reaches the roasting ear stage, piles of two. That is nothing but for several years—and the verses are yields cannot be kept up and the hogs are fitted for market during the sparingly at first, being gradually fun. But he learns how many two good. Mrs. Wright has used the returns from the use of lime in such cation.



Dr. Huber 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. Huber will not prescribe for individual cases or make diagnosis. Address Dr. John B. Huber, M.D., care of Wilson Publishing Co., 73 Adelaide St. West, Toronto

Stomach Ulcer.

catarrh of the stomach, blood pover- to be called in. ty (anemia), heart or kidney disease. It is the most common in women between twenty and thirty, especially! housewives and domestics; among freckles on the face? Is there anymen shoemakers and tailors are most thing I can do to take them off? frequently attacked.

The usual symptom is pain be- in fair-haired women with delicate

Their diet at first should consist night. beef may be added. They should take Is it contagious? or a mustard plaster over the stom- tagious.

. Inch. For thirst of any kind cracked Stomach or gastric ulcer may re- ice is preferable to water. For sult from a blow on the abdomen, hemorrhage the doctor imperatively or from chronic hyperacidity (ex- and at once. No food until he comes; cess of acid on the stomach), chronic in such cases the surgeon may have

Questions and Answers. Freckles.-What is the cause of Answer .- Freckles appear mostly

tween the breastplate and the navel skin. They are caused by exposure and in the back, usually sharp, in- to strong winds and to strong sun creased at once by food intake, and rays. Their temporary removal is relieved by vomiting. And when the not difficult. Permanent removal is stomach is empty there may be, if almost impossible. Those who have not pain, a gnawing and burning sen- freckles are likely to consider them sation which pressure may relieve. blemishes. This is an erroneous Then later comes spitting of blood point of view. They are really signs which has a ground coffee appear- of a good complexion and good conance, gradual loss of flesh and stitution and they ought to be constrength, dyspepsia and serious ane- sidered "beauty spots." Local prepmia. We have to fear perforation arations often contain corrosive subof the ulcer into the abdomen, with limete and other substances which grave shock or hemorrhage, or the may endanger the real skin-the development of cancer, or death from derma. In any event the susceptibilstarvation. A yet a patient well at- ity of the skin varies with the inditended to may get well, the ulcer vidual and what may not hurt one healing with scar tissue in the stom- might severely injure another. The ach wall. Some people who have following ointment (to be had of any gastralgia (neuralgia of the stom- druggist) may at any rate be proach) may imagine they have ulcer. | nounced "harmless." Ammoniate of Sufferers from peptic ulcer ought mercury, bismuth subnitrate, of each to give up all work and rest in bed one dram; ointment of glycerine one most of the time for several months, ounce, to be applied every other

practically entirely of plain milk or Psoriasis.-1. Is Psoriasis in the buttermilk (half a tumblerful every blood? 2. Can it be cured? 3. Is two hours), with the white of eggs it hereditary? 4. Are such people and beef-juice. After several weeks otherwise healthy and strong? eggs, chicken, cereal and scraped Will it turn to Bright's Disease? 6.

thirty grains of bismuth subcarbon- Answer .- 1. Psoriasis is not ate three times a day. For the pain blood disease. 2. Yes, but the cure sweet spirits of nitre, a teaspoonful is very difficult. 3. In some cases in water, or chloroform water, in it is hereditary. 4. Usually they are tablespoon doses. For vomiting healthy and strong but of a nervous cracked ice is preferable to water (a temperament. 5. It will not turn to teaspoonful every fifteen minutes) Bright's Disease. 6. It is not con-

Good results can be obtained with chicks by feeding rolled oats for the charcoal and grit are needed. On

all times so that they will make a Mediterranean breeds and eight months for the American breeds. The pullets should be separated from are easily determined and pullets with old hens, as the hens will drive them from the feed hoppers and interfere with their growth. Pullets are raised successfully on about the it pays to use about two parts of

to interest the child and start the In growing broilers, it is important until eight or ten weeks old with the young birds for the fattening crates.

Many good pastures have been

summer and early fall months. Dur- increased. With this there is little are. Later on he is delighted to be- work and play method with both of a system becomes less and may finally drop below that of land unlimed.

It will not be ground wasted to set out fifty or sixty raspberry canes this spring.

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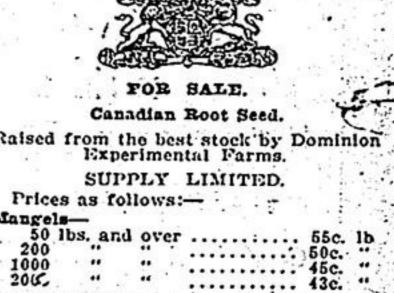
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