# **Efficient Farming**

## WHICH FERTILIZER SHALL I , phate. On the lighter soils the 0-14-

he is using it. The use of fertilizers has increased greatly during the last of nitrogen will help the seedings, decade but this increase is of little As a general rule, applications value unless the proper fertilizer was

Buying fertilizers by the brand name has been a practice long followed by farmers and should be discontinued if he is to get the most out of their use. Such names as "General Crop," "Wheat Grower," "Bean and Beet Special," are often misleading and do not give the farmer any idea of the total plant food present or the amount of each of the important elements. The law requires the analysis to be printed along with the name, brand or trademark, but oftentimes this is not noticed until after the fer- food. The cost of mixing, selling and tilizer is purchased.

Knowing the analysis of fertilizer used, will go a long way toward creat-ing a more favorable attitude toward the use of fertilizer, but it is just as important to know the kind of use one per cent. is used to pay other nec-Important to know the kind of use each part of the back of part of the high the high each part of the high the ing, and the different types of soil.

A complete fertilizer is one carrybut as long as the fertilizer contains all three it is a complete fertilizer. Any fertilizer which has only one or two of these constituents is not a complete fertilizer. Acid phosphate, sodium nitrate, ammonium sulphate and muriate of potash, etc., are not complete fertilizers and should not be used as such. They carry only phosphoric acid, nitrogen, nitrogen and potash respectively. Much unfavorable attitude has occurred among farmers be-

cause some of these fertilizers which carry only the one ingredient have failed as a "Cure All" for their crops. In using fertilizers the farmer should consider the soil on which the crop is grown and the plant food requirements of the crop. In general the use of phosphoric acid is profitable on all soils and on all crops. This cannot be said of the fertilizing constitu-

ents, nitrogen and potash. However, if acid phosphate is used alone on the sandy soils, the results will not be as profitable as it would be if some nitrogen were also used. The results from potash are variable but its use is highly recommended for leguminous crops, particularly alfalfa and sweet clover.

On the silt loam and clay loam soils the main requirement is phosphoric acid. Potash gives some response to sugar beets and beans, but on these crops it is often used in excessive amounts. Nitrogen is seldom needed where the farms are badly run, and green manures are not used in the rotation. Occasionally, where the soil Hens will molt. It is a scheme of some last winter's dress taken is poorly drained or of a lighter phase, nature that they shall rest from the the attic at the last moment. be dependent largely on the spring ing which time they grow a new coat weather. If the spring is cold so that on feathers. the nitrifying bacteria are not worktions of an available form of nitrogen should be made.

plant food and for that reason should tial requirements Litrogen through the use of farm ma-nures except where large amounts of ductivity of the hens so treated. highly concentrated feeds are pur-chased, and then only when good care with green grass, and above all things is taken of the manure to prevent have it adequately provided with leaching and loss of ammonia through shade. Every week in the year Mrs. Ken-leaching and loss of ammonia through shade. Every week in the year Mrs. Ken-leaching and loss of ammonia through shade. highly concentrated for tation and some turned under. With meal and Old Process oil meal. the use of these legumes and the ma-nure produced, the nitrogen balance posed of three parts of cracked corn huld be did to the part of what as a spratch are early hour. She knows the heads the head the plant begins to grow. On the ing a quick rapid growth of fine qual heavier soils that are badly run down ity feathers. Anything which we can s and no legumes, nor little, if any, manure available, it is sometimes profit. the rest period, is an economically able to use applications of nitrogen. Legumes can usually be grown on the heavier types of soil without liming. Legumes and manure should take the place of commercial nitrogen on these minion Horticulturist, in his bulletin farms. There is usually a large am- on Bush Fruits, is one of the easiest ount of organic matter turned under fruits to propagate. The suckers, ount of organic matter turned under on these soils, part of which is con- which are produced in great numbers, verted into nitrogen. barley or tats, an 0-14-4 might be used more profitably than the acid phos-

WHICH FERTILIZER SHALL I USE? I phate. On the lighter soils the 0-14-4 will should be chosen, while the soil or 0-12-2 are to be preferred to the should be rich in plant food an ex-acid phosphate for alfalfa or clover ertilizer to use on his farm and why e is using it. The use of fertilizers as increased greatly during the last of nitrogen will help the seedings. As a general rule arglinations of the soil is used to be the seeding. As a general rule arglinations of the soil is used to be the soil is and the soil is fertilizer to use on his farm and why seedings. If the soils are very sandy

potash have not shown profitable rethe lighter types of sands and sandy loams. Here applications of from two to four per cent. of potash has produced good increases in some of the

small grains. The use of high analysis fertilizer is an important consideration for the farmer. A high analysis fertilizer is one where the percentage of nitrogen, phosphoric acid and potash totals

fourteen or more. In buying a high analysis fertilizer more of the farmer's dollar actually pays for the plant general overhead expenses is the same per ton of low grade as high grade. With a 1-8-1 selling for \$29 per ton, \$11.50, or thirty-nine per cent. actually pays for the plant food, while sixtyprice of a 2-16-2 is say, \$40.50; \$23, A complete fertilizer is one carry. First of a long of the seven per cent., is used to pay was hers. ing n'trogen, phosphoric acid and or fifty-seven per cent., is used to pay was hers. Totach These constituents may vary for actual plant food. We have, then, ious for he farmer will be lessened. He can use Why, I even use a thermometer in the about ovens."

just half as much 2-16-2 as 1-8-1 and the cost on the market is only thirtynine per cent. more per ton. It should be evident from the fore-

going figures that it is cheaper to use high analysis than low analysis fertilizers. Where the difference in plant food is not so marked, the difference in without opening them, I first dipped saving, of course, will be less, but the up a little with a knife to see the texhigher the analysis of fertilizer the ture, for when there are many engreater per cent. of the farmer's dollar that will pay for plant food. The general trend of fertilizer practices is eliminated because they were cloudy, toward high analysis goods. Using or tough, or syrupy; the others had to the high analysis material does not be scored carefully. The tasting never mean that the right analysis is being became tiresome, though one would use, but it does go a long way in fol-think it a bit confusing to sample fif-

The efficiency of fertilizers is dependent largely on the soil reaction. Oftentimes it is necessary to apply lime first and if the soil is strongly acid, lime should be the first consid-

eration. In using fertilizers it should be kept in mind that they will not overcome seasonal or climatic conditions, but when used with good judgment and also as Christmas presents. other good farm practices, they will prove profitable on most Ontario farms



top dressings of nitrate of soda or sul- strain of egg production, build up everyone would take the time to phate of ammonia, have shown very their body weight which has decreased, noticeable effects. These effects are renew the yellow pigment in their bo-not the same year after year, but will dies through the addition of fat, dur-the first cool day.

Though the length of the molt is ing to their maximum, then applica- primarily an inherited trait in that poor producers molt slowly and heavy Nitrogen is the highest in cost of the molt in any hen can be materially single element in commercial speeded up by providing a few essen-

only be used when necessary. Fortu-nately, manures and legumes can be have an abundance o. green feed. Trysubstituted as the source of nitrogen, ing to molt out a bunch of hens on a It is impossible to supply enough dry bare yard is nothing short of sui-

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As a general rule, applications of loam, one of the best soils for black-potash have not shown profitable re- berries, there is likely to be sufficient turns for general crops on any but plant food without too much mitro-

Ways to Mak

y of space or not less than eight soil the rows and the plants not less than eight ex- feet apart and the plants not less than d as three feet apart in the rows. Where the blackberry grows vigorously, four d feet apart is not too much.

S. men move through life as a oughtare, flinging out melody and har-mony through the air to everyone far: INTRODUCTION It might have gen. The soil should be well prepared, mony through the air to everyone far as for all other bush fruits, and a good application of well rotted barryard Beecher.

> on Fair hibits

ing to judge, and, since you cannot tell trimmed with Armenian lace sewed on more remarkable is it that the passage without opening them. I first dipped by hand, which took the prize over to be read, supposing the lesson to be up a little with a knife to see the tex-ture, for when there are many en-tries you can demand that the texture be perfect. A few glasses could be nainsook, while it was dainty, could eliminated because they were cloudy, be boiled when laundered, hence was ings of salvation to the poor, open the or tough, or syrupy; the others had to more sanitary. Judges consider prac-prison of cantive souls, restore sight to

Mrs. Kenton started her canning that these points were considered. when the first tender asparagus show- Next year I expect to find the same yoke entered again, but attached to

seams was convincing. The seams

for company, while others were for everyday. For exhibit, all the jars were uniform, wide-mouthed, and of clear glass rather than of glass having. I found I had finished some

# ing time of the year, when the weath-cr is usually hot and dry, if there is not a good sup of moisture in the soil the fruit will ary up. In selecting success to plant. As a soil, one that will retain moisture blackberge performed as a plant. As SEPTEMBER 14.

Jesus Driven From Nazareth, Luke 4: 16-30. Golden Text He hath annointed me to preach the gospel.-Luke 4:18.

ANALYSIS. I. THE GREAT ANNOUNCEMENT JESUS. 16-22. II. THE GREAT REFUSAL OF THE NAZ-ARINES, 23-30. INTRODUCTION—It might have been texpected that in Nazareth, where he had been brought up, the welcome given to Jesus on his first public ap-pearance would have been specially belongs the supreme ignominy of not only giving no hearing to Jesus, but of thaving alone, among the Galilean ities willed. ENMITY. ANALYSIS. I. THE GREAT ANNOUNCEMENT a JESUS. 16-22. II. THE GREAT REFUSAL OF THE NAZ-ARINES, 23-30. INTRODUCTION—It might have been pearance would have been specially belongs the supreme ignominy of not only giving no hearing to Jesus, but of having alone, among the Galilean tities willed. The Jews and their kinsfolk, the

a difference of eighteen per cent in favor of the 2-16-2. On the other hand, the cost of handling by the farmer will be bessend. He can use Why I can use a thermore to the the the the text area?" "Then, too," Mrs. Gibney added, a The roll, written on parchment, would impless the recipe is not all, that the cake can just be ruined in the wrong be wound on two rollers, which the all in the way you handle the dough. cake cracks; there is much to know tween them, on the uncolled portion of the roll, is the passage which he wishall in the way you handle the dough. Why, I even use a thermometer in the about ovens." pan of water where I set my dough, to see that the yeast will not get chilled, and another thermometer in the oven. There is so much to know before you can make a perfect loaf!" The jellies were the most interest-ing to judge, and, since you cannot tell without opening them, I first dipped

mainsook, while it was dainty, could be boiled when laundered, hence was more sanitary. Judges consider prac-ticability and wearing qualities as well as mere beauty. If you can get a good result with less time spent on the summer, so much the better, for the number of hours spent in its construc-tion does not count when a garment is in competition with others. At one fair there was only one class for the "best tatting article." There were many entries, and for other dis-take not having a prize offered for the best dresser scarf and for other dis-intendent of the department called my tion to a camisole she admired, made it, and the work was beautiful Then I explained that the material of the camisole was cheap and unattrac-tive, not good enough to combine with

Then I explained that the material of the camisole was cheap and unattrac-tive, not good enough to combine with fine handwork, and that the pink rib-bon was gaudy, spoiling the daintiness of the garment. She was surprised that these points were considered. Next year I expect to find the same yoke entered again, but attached to a different camisole. back to the attendant. Jesus sits down —the usual posture of the teacher,— and while every eye is fixed attentive-begins his sermon with the words, "This day is this scrinture fulfilled in vour ears." What followed is not re-corded, but is left to our imagination. The Nazarenes are astonished at the "words of grace" which flow from Jesus, but inwardly in their hearts "words of grace" which flow from Jesus, but inwardly in their hearts they are measuring him all the time by human standards, and saying, "Is not this Joseph's son?" They are un-willing or unable to realize that "the son of Joseph" may also be God's Son II. THE GREAT REFUSAL OF THE NAZ-**ARENES**, 23-30

Ways to Ma
on Pair cantibuts

I has year 1 judged the women exc.
By before, as the cakes and picture to the judges while they are still.
For the variant of the state of the bread, as several women aked to the bread, as several women aked to the state of the bread, as several women aked to the state of the bread, as several women aked to the state of the bread, as several women aked to the state of the bread, as several women aked to the state of the bread, as several women aked to the state of the bread, as several women aked to the state of the bread, as several women aked to the state of the bread, as several women aked to the state of the bread, as several women aked to the state of the bread, as several women aked to the state of the bread, as several women aked to the state of the state state of the state of the state of the state of the sta

behest on his death bed. And the early Moslems went forth in a religious frenzy offering to all, "Islam, exite, or the sword!" To Abu Bekr, the mildest of the prophet's successors, even Mos-lems complained of the severity of Khalid (surnamed "The Sword of Allah"). "The sword of Khalid," they said, "dipped in violence and outrage, must be sheathed." "Nay," replied Abu Bekr, "the sword which the Lord hath made bare against the unbeliev-ers, shall I sheathe the same? That be far from me."

### **Better Fruit Shows.**

We are just entering the fruit-show eason, and from now on until December, one is likely to encounter them anywhere.

They are always interesting to the fruit enthusiast, and usually to the general public, and have certainly had an important influence in molding and developing our fruit industry; but one sometimes wishes that they might be managed differently in some respects.

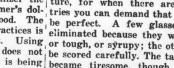
The two main objects in a fruit show ought to be, first, to educate the pro-ducer, enabling him to grow better fruit and prepare it better for market; and second, to interest the consumer in fruit as an article of diet, convincing him of its value and educating him as to ways in which it may be used.

It is seldom that one finds either of these objects very fully carried out in a fruit show.

In the writer's experience and observation, the following are some of the most common ways in which the average fruit show falls down:

The exhibits are not sufficiently well labeled. The visitor wanders past the show of apple varieties with nothing to tell him whether the big red apples which arouse his enthusiasm and interest are Wolf River, Spitzenburg or Wealthy. He doesn't know what the collections of varieties are intended to illustrate, and there is no thing whatever to tell him what the exhibitors are trying to show in the

well with many launderings. The woman said to me: learned several things about found I had finished some comment, "But what are the 'signs' of wrong way, and have all his calling?" The Nazarenes share the easy stored away in my mind common view, that the spirit of God if properly handled and labeled, and a blue tinge. Every week in the year Mrs. Ken-the work I am going to make, announces itself only in the extraordi-the work I am going to make. size.



teen plum jellies. There seems to be some confusion as to the difference between conserves, as several glass were entered in the wrong cla

ses. Mrs. Kenton went to her cou prepared to win. In the long

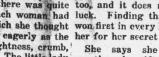
evenings she had been busy crow articles listed in the old premiu and pretty sure to be in the next these crecheted things were in

as the new catalog came checked entries she interest It was in August that an woolen material and made a dress for her daughter, trimmi in red braid and carefully binding seams. Of course it would win

some last winter's dress taken a new dress to exhibit, but in the

when the first tender asparagus showed above the ground. Green peas, sweet corn, beets-in fact, everything a different camisole. poor producers molt slowly and neavy producers molt rapidly, nevertheless the molt in any hen can be materially were graded as to size, perfection, and wondered why, but one look at the infrom the garden was canned when at ripeness, as is customary in canning side of the garment with its unfinished factories. That way the pieces in each jar were evenly cooked; there were would pull out, and the garment would especially good jars for exhibit and not wear well with many launderings. for company, while others were for everyday. For exhibit, all the jars

clear glass rather than of glass having seams



and innoculation, however, alfalfa terially to molting hens, thereby en-and sweet clover can be grown on abling them to build up their body most soils, and therein lies the Ley to weight more quickly. Put into the lay-the solution and therein lies the Ley to molting mathematical and therein lies the Ley to mathematical and there and licky is the solution to the lay-the total and therein lies the Ley to mathematical and the lay-the total and therein lies the Ley to mathematical and the lay-the total and therein lies the Ley to mathematical and the lay-the total and therein lies the Ley to mathematical and the lay-the total and therein lies the Ley to mathematical and the lay-the total and therein lies the Ley to the lay-the total and therein lies the Ley to the lay-the total and therein lies the Ley to the lay-the total and therein lies the Ley to the total and the lay-the total and therein lies the Ley to the lay-the total and therein lies the Ley to the lay-the total and the lay-the t the nitrogen maintenance. However, ing mash which you would normally this clover should be grown in the ro-feed them increased quantities of corn tation and some turned turned in the more turned to the source of the source of

do to hasten the molt, and thus shorter sound practice.



The blackberry, points out the Do

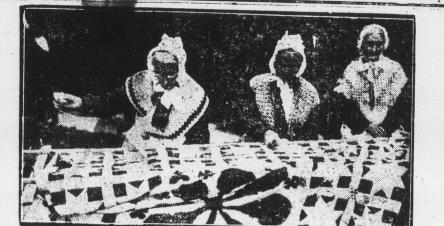
may be used, or if it is wished to On the poorer types of soil a 2-12-2 propagate a variety even more rapidly or 2-16-2 fertilizer should be used for wheat or rye; on the better types of planted. The roots, cut into pieces two or and a solution of the roots of soil acid phosphate can be used just as well. For corn or oats, acid phos-phate is usually sufficient. For alfal-fa or clover, some potash should be inches deep. After one season's growth, if the soil has been well culti-ented there will be good plants available.

As the blackberry ripens at a try-

The night before she plans going to year. While she had won prizes in the nure produced, the nitrogen balance posed of three parts of cracked corn same time setting the alarm took for terea courage to complete with women should be fairly well maintained. On and one part of wheat as a scratch an early hour. She kneads the bread, twice her age. It was interesting to home in Israel to which God

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tables at six neighboring fairs last which Elijah and Elisha formerly met plates ought to be changed. with among their own people. Vs. 25-27. No prophet is accepted in



The preservation of the old household arts is one of the things which was featured at the recent Royal Dublin horse show at Ballsbridge. The Irish persant women are working on a big patch quilt.

There ought to be an exhibit of cooked fruit in every fruit show. Let people know that there are other ways in which the apple may be used besides in ples.

The exhibit of varieties of fruits on prominence should be given to collechis own country. When Elijah was fleeing from persecution, there was no commercial varieties of apples has tions of commercial varieties. A prize commercial varieties of apples has rcal value for anyone in doubt as to what he ought to plant.

In many sections prizes for adver-tising exhibits may be made a valuable feature. If growers are selling either at their farms or through local groceries, the exhibit may be one suitable for a store window or a roadside stand, and the competition may be among the growers themselves, and many valuable suggestions may be passed on to less ingenious people.

Or, if the fruit show is in a city the prizes may be offered to the stores which put on the best advertising displays. In this latter case we not only get the advantage of passing on tc others good ideas in advertising, but we get the advertising value of the exhibits themselves.

Doubtless many other improvements might be made, but if the above could be injected into our fruit shows it ought to put most of them on a more useful plane than they now occupy.

#### Ancient Experts in Dyes.

The people of Tyre were such experts in dyeing that Tyrian parple remains unexcelled to this day

Head-hunting is still the main ocupation of the cannibal tribes of the Upper Amazon; the captured heads are shrunk until they are as small as errnges, and then kept as or america