

manuring, to stand the strain of raising beans and wheat; but for such land, the "Garden of Ontario" (Kent) is justly noted.

MARKETING SMALL FRUITS.

BY ELLIS F. AUGUSTINE.

One of the most important points in successful fruit-growing is to have all varieties gathered and marketed at the right time; but with no other class is this as essential as in the case of small fruits. It is a great mistake to allow small fruit to become over-ripe before picking, and especially so if shipping to distant markets; but it is just as great a mistake, and one more commonly practiced, to gather it before it has fully matured. This is especially the case in regard to strawberries, as is evident to the most casual observer who visits our town and city markets; and it is small wonder that complaints are so frequently made by intending purchasers, and extra prices are willingly paid for choice, uniform lots of perfectly matured, full-flavored fruit, while inferior lots are a drug on the market.

In marketing, arrangements should be made to have all fruit in the hands of consumers within 24 hours after picking. If this be done, and care be taken to have every shipment of the best possible quality and even brand throughout, put up in clean, well-filled packages, no fears need be entertained as to the result. But to secure this a full force of reliable pickers must be kept constantly at hand, and great care exercised by the overseer that no imperfect fruit is placed in the boxes, as a grower may be never so honest, if his pickers are unreliable and fill up the boxes with leaves and crushed and dried-up berries, and then top off with the largest and choicest fruit, his reputation will soon be irredeemably ruined.

But the observant small-fruit grower will soon discover that it is not always in the large cities that the most satisfactory and remunerative markets are to be found. There are hundreds of towns and villages where the people cannot get half a supply of choice fruit, even at higher prices than are paid for it in the cities. This may appear strange, but it is nevertheless true, as the writer has learned from personal experience, for after shipping to commission men in cities, empties have sometimes returned with shipping tags attached bearing the address of grocers in small towns many miles nearer the producer's home than were the first points of shipment. This may be accounted for by the fact that all extensive growers ship exclusively to large markets, while smaller ones are left practically unsupplied. The method which we now pursue (and it is one which might be most profitably followed by all small-fruit growers) is to take each forenoon's picking to our local towns and deliver direct to consumers, and then ship the afternoon's picking by night-express to agents in cities and have it distributed to consumers early the following morning. This secures good prices all round, and ensures all fruit being placed in the hands of consumers while still fresh and in the best possible shape. If all growers would follow this method and offer for sale none but first-class fruit—or else grade according to quality—and then place them in closer relationship with consumers, our markets could be developed to an extent at present undreamed of. But for some time this need scarcely be look-

ed for, as there are always a number of careless, unprincipled persons engaged in every vocation. But these will eventually be crowded out by their more honest, careful, energetic competitors. Consumers are quick to find out and patronize reliable producers who offer for sale nothing but articles of the very first quality; and time will bring about in this case, as it is doing in that of all others, the survival of the fittest.—*Farmer's Ad.*

COVERING THE SEEDS.

A FEW OF THE IMPORTANT ESSENTIALS
TO PROPER GERMINATION.

For all seeds a certain degree of heat and moisture is essential to the proper germination. In order to have them grow, contact with the soil is also necessary. It is largely for this reason that more or less covering is always best. The nature of the growth of the plant and the conditions under which the seed is sown are factors that must be considered in determining how much covering it will be best to give. Even with the same seeds a difference in the conditions under which the planting is done will make a difference in the depth of covering that should be given. In many cases the same kind of seed sown early should have a much lighter covering than should be given later on after the soil becomes warmer and drier. With nearly all seeds sown broadcast, especially those sown in the spring like grass, clover, oats, flax, barley, millet and Hungarian grass, only a light covering, such as can be given with a light harrow or drag, is all that is necessary; and the better the condition of the soil after the harrowing is done, the better will be the results. With all crops it is an item to have a good, even stand, and hence it is important that the seed be distributed as evenly as possible over the surface and that the work be done under as favorable conditions as possible. (1)

Of cultivated crops, sorghum and beans need only a light covering, but when the conditions will admit both corn and potatoes will do better if they can be covered reasonably deep. But if covered too deep early in the spring, especially when the soil is rather wet and cold, unless the weather continues favorable, the seed will rot before it will germinate. So that with the earliest planting it is often best to cover shallow, while later it will be much the best to cover deep.

The principal advantage in covering deep is that the roots, growing deeper in the soil, will not be so easily affected by drought, and then, in many cases, the deeper covering is necessary in order to secure the proper moisture necessary to a good germination.

Another point in making a good start to grow is to have the seed come in close contact with the soil. A better germination, as well as a more vigorous growth, can be secured by taking care to have the soil in a good tilth before planting.—*Saint Louis Republic.*

KILLING THE CODLING MOTH.

Secretary Morton sends out the following little slip in relation to the destruction of the codling moth:

"Use Paris green at the rate of one pound to 150 gallons of water. Weigh

(1) Very true, but cover thoroughly and harrow well.—*Ed.*

out sufficient poison for the capacity of the tank used, and make it into a thin paint with a small quantity of water, and add powdered or quick lime equal to the weight of poison used, mixing thoroughly. The lime takes up the free arsenic and removes the danger of scalding. Strain the mixture into the spray tank, taking care to pulverize and wash all the poison through the strainer. During the operation of spraying see that the liquid is agitated with sufficient frequency to prevent the settling of the poison.

"The prime essential in spraying is to break up the liquid into a fine mist, so as to coat every leaf and part of the plant as lightly as is consistent with thoroughness. This should not require more than from three to seven gallons for a comparatively large fruit tree.

"Let the first spraying follow within a week after the falling of the blossoms of either apple or pear, and follow this with a second treatment just before the fruit turns down on the stem, or when it is from one-fourth to one-half inches in diameter. The first spraying reaches the eggs laid by the moth in the flower end of the fruit shortly after the falling of the blossoms, and the second the later eggs laid by belated moths. Do not spray trees when in bloom, and if a washing rain immediately follows treatment, repeat the application.

"Knapsack sprayers suitable for applying the insecticide can now be obtained at reasonable prices at all agricultural implement stores."

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The Flock.

THE EARLY FEEDING OF LAMBS.

A feature of the last Dominion Sheep Breeders Association meeting was an able review by Mr. Richard Gibson, of the papers published in the report of 1893. In discussing the excellent paper on fattening sheep, by Mr. James Sharp, of Everton, Ont., Mr. Gibson said:—

"I would ask your (members present) opinion as to whether due value is given to the importance of teaching lambs to eat a little grain before going to pasture. My own experience teaches that at no time do lambs pay as well for grain consumed as when on the ewes, and I would recommend that a pen be made in the pasture, provided with a creep, where they can daily have a ration. Castration and docking (operations often neglected, especially the former) are given due weight. Again, Mr. Sharp very properly recommends early weaning; but is not the date

named, the middle of August, too late? Would they not be heavier lambs by the middle of September if weaned in the latter part of July? I wean just as soon as I get a good clover aftermath."

The Chairman:—"The question of feeding lambs while on the ewe is an important question, and I have no doubt Mr. Snell will have something to say on the subject."

Mr. J. C. Snell:—"Mr. President and Gentlemen,—While I quite approve of feeding lambs while they are in the pens with the ewes, before they go out to grass, my experience is that it is hardly profitable to feed grain to the lambs after they have gone out to grass, while they are still with the ewes. I think they need it while in the pens, when the ewes are being dry-fed principally, and the lambs will pay well for it when in their growth, but I think when they get out on to the fresh grass in the spring, they get sufficient food there, and it is not necessary and not profitable to feed grain all through the summer, while the lambs are with the ewes."

Mr. Campbell:—"My experience, and what I have practised, has been to feed them while they are in the pens, and, with Mr. Snell, I have found that lambs, on good fresh pasture, will not eat the grain until the pasture begins to fail. To push them on, I think it is profitable to begin again before weaning, so when they are ready to go on a heavier feed of grain they will not miss the nurse when you take it from them."

Mr. James Russell:—"I believe the statements of the gentlemen are both about the same, but there is something they do not tell everybody. They do not tell you what they give them, or how they give it. There is no doubt a great deal can be done by feeding lambs before they go out on the grass, but I have seen cases where a great deal of harm has been done by feeding improper foods, and it tends to produce this 'harsh wool' we have heard about. I think the feed has a great deal to do with that, and I think a little oil cake and oats or bran will produce or commence a better growth of wool than feeding on harsh grain, such as barley or peas." (1)

J. D. Hanmer:—"I think you have the best result from feeding the mother well in preference to feeding the lambs. From my experience, I prefer to feed the mothers well, and let the lambs get the nourishment from them, and I might just say here that I have a very high opinion of rape. If I can have a good piece of rape to put my lambs on at weaning time, I do not need any grain. I have been over the country perhaps as much as any other man, and seen as many flocks as any other man in Canada this year, and the best flock of lambs that I have seen was a flock that were taken off their mothers very early—I think as early as some time in July—about a month earlier than we usually take our lambs from the ewes, and they were put on rape, and they were further advanced than any flock of lambs I have seen in Canada this year."

The President:—"I will agree with Mr. Hanmer. I know he is well up in feeding matters, and I would ask you to look at one of these mothers down at the show. I will now call on Mr. Simenton."

Mr. Arthur Simenton:—"Mr. President and Gentlemen,—You know the breed of sheep I keep. They do not require a great deal of feed. I make a specialty of Southdown. I used to keep a coarser wool sheep, and I used

(1) Cake and peas are the best food for lambs.—*Ed.*