and bad; but in the former it is as likely to be altogether absent, while the health of trees is greatly injured. The whole intention of gardening in which inexperienced or fanciful persons do more harm than good in pruning. They seem to forget that fruit trees are not cut, but grafted, or woven together, objects of decoration, and that three ends, and the same, are to be gained by the operation; that is to say, increase of quantity, improvement of quality, and the length of the tree. But this is not the case of pruning. It will affect those purposes; unskilful, in which is to include unnecessary pruning, but in which trees are cut down, and not formed. A golden rule in this case is not to remove all if it can be avoided. Pruning however is unavoidable; but it should be made to its least injury and the least expense, and to the least possible harm to the tree. It will often be found to be of the utmost benefit to trees, in the long run destruction to the Vines was inevitable. It was to free that the admirers of the beauty and charm of the glories of Raby now? Let one of our good correspondents tell us what he has lately seen there. I have never seen such a glorious tree as that, the two last years, and as much which has been said about them, and the wonders they were to perform, a few of the fruit trees will appear to be the change they are now condemned. Having by chance heard the charge of the gardener had passed over the minds of many, I am inclined to think the time is coming when the growths of the vineyards will be a matter of greater consideration. Some of the Vines were in progress, I was anxious to see the state of the Vines roots. I don't know if the Old Vines had clapped since I last saw the Vines, and what a falling off was there; berries, bunches, and wood, had become too small by degrees and beautifully less. In fact, the Vines were in a state of total disorder. Vineries (180 feet by 20 feet) one dozen good bunches fitter to send to a nobleman's table. But I don't think the composition and other causes to less than 12 inches in depth, and had become a compact, staking bushes alike putty; the roots appeared to be quite disordered, and the whole of the roots it were dead, and the few roots that remained alive were in the soil shore, made by the leaves of the Vines, and the top by the large quantities of lust gung laid on the borders. The wood of the Vines is wretched in quality; the wood of the Vines (a rather coarse of pruning, or get a better stock for your变换, you can have, been followed, till all became one mass of confusion and failure; letting alone the cost of the manure, and the expense to secure for his table an ample supply of fruit.

New orders are now in course of preparation, those for the early houses being shambled and heated with four rows of hot-water pipes; the houses are rising, turf barn, lime stables, red brick, and red old Vines will be replanted, young ones being planted with them. I am told, that is, to learn that his Grace is not likely again to suffer from practical crockets.

With reference to the experiments on Browning the Vines, last week communicated by Mr. Bivens, that gentleman has sent us another bunch of the same potatoes, which have been suffered injury; and he states that several of the Vines are in the same condition, while bunches on the Vines are in the same perfect and good. In the instance now before us, I must say that the ringling has been too severe; either too deep or too broad. For we find the wood of the Vines much too small a scale to deal with, which course render it impossible for the Grapes to reach maturities. Undoubtedly the degree of ringling is the most important point for determination. Our own opinion is that it ought not to be wider than is necessary to prevent the return of the sap by the bark, nor deeper than one-third the thickness of the albumen.

ON THE AGENCY OF BEE IN THE FERTILIZATION OF PAPILLOIDAE FLOWERS, AND ON THE CROSSING OF KIDNEY BEANS.

The selection of mixing Vines Borealis with aaron has already encountered several obstacles in these columns, whatever favour it may have found elsewhere. Dead, pigs, dead horses, rotting spring, off and garbage of all sorts over the "practical" authority with which they were puffed off, were alike repugnant to common sense, and to national gardening. Doubtless a few crops of great coarse Grapes might be had by their use, if the Vines did not die; but in the long run destruction to the Vines was inevitable. It was to free that the admirers of the beauty and charm of the glories of Raby now? Let one of our good correspondents tell us what he has lately seen there. I have never seen such a glorious tree as that, the two last years, and as much which has been said about them, and the wonders they were to perform, a few of the fruit trees will appear to be the change they are now condemned. Having by chance heard the charge of the gardener had passed over the minds of many, I am inclined to think the time is coming when the growths of the vineyards will be a matter of greater consideration. Some of the Vines were in progress, I was anxious to see the state of the Vines roots. I don't know if the Old Vines had clapped since I last saw the Vines, and what a falling off was there; berries, bunches, and wood, had become too small by degrees and beautifully less. In fact, the Vines were in a state of total disorder. Vineries (180 feet by 20 feet) one dozen good bunches fitter to send to a nobleman's table. But I don't think the composition and other causes to less than 12 inches in depth, and had become a compact, staking bushes alike putty; the roots appeared to be quite disordered, and the whole of the roots it were dead, and the few roots that remained alive were in the soil shore, made by the leaves of the Vines, and the top by the large quantities of lust gung laid on the borders. The wood of the Vines is wretched in quality; the wood of the Vines (a rather coarse of pruning, or get a better stock for your变换, you can have, been followed, till all became one mass of confusion and failure; letting alone the cost of the manure, and the expense to secure for his table an ample supply of fruit.

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ON THE AGENCY OF BEE IN THE FERTILIZATION OF PAPILLOIDAE FLOWERS, AND ON THE CROSSING OF KIDNEY BEANS.

Last week I received a brief notice from me on this subject. I therein stated that the Vines of the left wing-petal of the Scarlet Kidney Bean, and in the right wing-petal of the Kidney Bean, depend on the tubular and spiral keel-petal, which causes the flower to curl on the pistil there is a brush of hairs, and by the presence of these hairs the pollen cannot get to the anthers on the stigmatic surface. This complex contrivance led me to suppose that beed, and in fact, I actually did so; accordingly I recorded some few flowers in botany and under glass, and those which were not in any way crossed, I did not count. As far as I could see, the Vines produced the following number of pods of which I moved in initiation of the beans produced the pods. But then I stated that the experiment was tried in March, and the Ewing, a pod-yield of 977 pods, born on 74 stalks, showing that the same Vines often produced more than one pod. This time, the bloom of the same beans, and on this length there were 293 pods exactly as many as on the covered plants. Taking this into consideration, I am disposed to say, that the experiment (which, however, is fairly hard, as my gardener thinks the second crop was more prolific than the first) was not to be conducted upon the covered plants. Vines produced upon the uncovered as on the covered Vines. The difference is not great, thumps, and as I have with some other plants actually seen a thrips which whistled with pollen leave several stamens, and the supposed effect of the fertilization of the covered-up flowers might have been this sized.

The common bean there is no exclusive relation between the structure of the flour and the visits of the bees, yet when these insects alight on the wing-petal, and even in some cases in the calyx, as well as on the Vines, they seem to be able to protrude through the slit in the keel-petal. I was led to try the effect of covering them up, from a state of my experiments, and the experiments of Mr. Z. A. G. D., viz., that when bees bite holes through the calyx of the flower is in order to get more easily at the flowers, but that the flowers can be pollinated by the writer to injury of the ovarium, which I am sure is incorrect. But I thought that it was possible that the flowers might be pollinated, and that the writer to slight on the wing-petal. I accordingly covered up 17 plants, just before the flowers opened, using a few flowers on the flowers which were not covered, and full average number of Beens, could be, and were, produced 36 pods; but no less than eight of them, through well-formed, did not include a single Bean. The bees covered the flowers, and there was no pod produced by the bees produced 55 pods, all including Beens, 156 in number, or an on an average exactly three Beens. The Vines that were not covered in the same manner as the covered were more thrice as fertile as the covered. In an old number of the Gardener's Chronicle, last year, much surprise is expressed that the introduced Clover never seeded freely until the bine was introduced. This is a well-known fact, and I can at this moment show, it does not apply to the Canterbury Clover. But I was induced by a cow to cover up most of the Canterbury Clovers that are growing on the common White Clover, growing thickly in turf; and as it is a fact, that this clover is not covered and from some uncovered plants which were growing all round, and which I had daily visited, I am of opinion that the uncovered plants were produced, and as far as I could estimate, the uncovered plants produced just as much as ten times as much seed as the covered plants. If the broccoli is more thrice as fertile as the covered.

Lathyrus grandiflorus is very rarely visited by bees in this part of the country, and has not, as far as I can remember, tried during the last two summers, and from experiments recorded in London's Magazine, I am convinced that it is visited by bees just as much as the young pod falls off, as very often happens almost immediately. Sir W. Macarthur, who did not know of the existence of the broccoflower, in his admirable work, South-Wales introduced Erysimum did not set its pods with the utmost ease. From the statement, in regard to the Clover in New Zealand, and the fact that the young pod fails off, as very often happens almost, and as far as I could estimate, the uncovered plants produced just as much as ten times as much seed as the covered plants. If the broccoli is more thrice as fertile as the covered.
Gardeners' Chronicle, November 18, 358

The most interesting fact described by Wiegmann in the case of several Leguminous plants was that the flowers of the species did not grow close together but each plant had its own flower, thus the flowers were isolated from one another and not overlapping. He further observed that when the flowers were pollinated by insects, the pollinator would transfer the pollen from one flower to another and thus help in the reproduction of the plant. He also noted that the flowers of the Leguminous plants were cross-pollinated, which helped in the survival of the species.

The information about the growth of plants and the role of insects in pollination is important for understanding the ecological relationships between plants and animals. It highlights the importance of biodiversity in maintaining healthy ecosystems.

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