

The

FRUIT-GROWER

Market Gardener & Glasshouse Nurseryman

Let us face the facts together

From being industrially dominant, with investments in every land, this country has suddenly become desperately poor. It is painful, yet it is a fact. Two lessons are being learned — the preciousness of financial independence, and the need to grow more food at home.

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The FRUIT-GROWER

Market Gardener & Glasshouse Nurseryman

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FRUIT TARGETS REACHED?

HOME MARKET REMAINS UNEXPLORED!

By R. W. Harriss

AT one of the fruit tree sales held last winter, I met an acquaintance with whom I had completely lost touch for about 12 years. Quite naturally we swapped confidences covering those years, and in the course of conversation I heard my friend had taken another farm of some 130 acres which, for the past four years, he had devoted to extensive market gardening and dairy farming. The dairying being decidedly the secondary branch with him, he can hardly be classed as a "double event" grower as described by Mr. A. W. Secrett in *The Fruit-Grower* of January 20.

He commented that in the first season he could do nothing wrong, but since then it had become increasingly difficult to make the vegetable side pay, and he had now decided to go in for fruit-growing.

Like Market-Gardening

There is not much doubt that if it was as easy to change to fruit-growing as to vegetable production, the fruit-growing industry would soon be in the same chaotic state as market gardening.

I must admit I felt some annoyance at the attitude of this grower, who spoke as though the change over was as simple as switching from selling matches to bootlaces.

There was no fear on my part that he and his kind would create a glut of fruit in the near future, as his choice of trees seemed to be entirely guided by the price, but it is to be hoped there are not many who contemplate growing fruit in the same casual manner. If this happens we shall have considerable acreages of indifferent to poor trees, from which only crops of poor quality can be expected.

Being firmly convinced that our home market potential is practically unexplored, I am of the opinion that there is plenty of room for new plantings of most hard and soft fruits in this country, but the time has come when quality must be a first consideration. Very considerable expansion in the industry is possible and

desirable, provided the grower is determined to produce good quality fruit at a price that is within the reach of the average family purse.

This, of course, is much more easily said than done, but the sooner growers take a real interest in the "goose that lays the golden eggs," i.e., the public, the better it will be for an industry which has been given a new lease of life and which should be carefully nurtured.

There seems to be a fairly general feeling of uneasiness among fruit-growers regarding future markets, for soft fruits in particular.

The information goes around that acreage targets for certain soft fruits are being rapidly approached; indeed, with black currants we have been told it has already been passed. It would be of great interest to many people, including growers, to know how these targets are fixed, and by whom.

If they are based on pre-war demand and consumption of home-grown fruit, the sooner they are scrapped the better for producer and consumer. In those days it was not nearly so much a surfeit of fruit that brought the industry to such a low ebb as a very real scarcity of cash among the mass of would-be consumers,

plus an almost entire lack of co-operation on the side of the processors. To round off this truly unhappy state, the Government certainly could not have cared less.

To obtain a true picture of a sensible target aim, I feel that after hearing the views of the average grower, one should also get the opinion of the housewife. There is not much doubt that the result would be quite illuminating, and I am certain the grower would become convinced that the true target was such that he need have no fear of passing it for a very long time to come.

There must be hundreds of thousands of families in this country who did not have the opportunity of tasting one decent pie or pudding made with fresh soft fruit last year; nor will it be much better for them this season, despite a likely big increase in production.

With More Sugar . . .

With an increased sugar ration or, better still, its de-rationing, those of us who have not entirely lost the taste would be able once again to enjoy those richly-sweet pies and puddings now little more than a memory.

With fruit and sugar available (and maybe some fat for the crust), a great deal could and should be done, by carefully planned national advertising, to encourage the fuller use of fresh fruit.

This advertising should not be a copy of the colourless appeals we have seen from time to time, such as "Eat More Potatoes," but should be forceful and imaginative, occupying a good deal of space in suitable media, and including some of those splendid country recipes of old.

Let the home grower appreciate the strength of the British market as well as do foreign and overseas senders, and there will be little cause for pessimism; nor, in the course of time, much room for imports of those fruits which can be more satisfactorily grown here.

There is no doubt that the rapid expansion of the quick-freeze industry is doing much to create greater confidence

IN THIS ISSUE

Hereford Meets The Machinery	614
N.F.U. Final Frost Report	614
Viewpoint	615
Flower Corner	615
Devon County Show	616
New British Apple Grader	617
Soil Erosion Risks	618
N.A.A.S. Has Many Tasks	619
Where Will Soft Fruit Finish?	619
Districts	620-621
Letters To The Editor	622
Market Information	623-624

among growers of soft fruit, and again this season very attractive prices are being offered, but it must be remembered that the demand from this new and most important outlet is entirely dependent on the eventual demand of the consumer. The majority of the population are compelled to buy that which offers most for money, and it is with this majority that lies the tremendous potential demand of the future.

The public as a whole must be educated to the fact that it is as healthful and necessary to include fresh fruit in the diet as it is bread, milk and meat. That fruit should be considered a luxury is all wrong, and it is clearly a duty to the fruit-grower to provide fully for the

manifold needs of the normal domestic consumer.

Owing to the widely different standards of quality in fruit, it is quite impossible to fix prices that are fair both to the grower and consumer. Yet one thing is certain. The profit margin of the wholesaler and retailer must be drastically cut. On several occasions last year, I noticed as much as 1s. 6d. per lb. profit being asked for soft fruits. That kind of thing is enough to make the average housewife shy at asking the price, much less buying.

To those who have misgivings with regard to the future prosperity of the fruit-growing industry in this country, I would say, "Go ahead and plant," but let it be done in the right spirit.

Hereford Meets The Machinery

Some First Time Displays In Large Demonstration At Tillington

THE largest demonstration of horticultural machinery ever held in Herefordshire enabled fruit-growers and market gardeners in the West Midlands to keep pace with latest developments in this wide and interesting field at Tillington, last Thursday. The programme was arranged by the N.A.A.S. and the Herefordshire A.E.C. over 50 acres of the C.W.S. Fruit Farm.

Agricultural engineers have entered into the mechanisation of horticulture with enthusiasm and there is a wide range of machines for all purposes on the market. In the past some have not lived up to the claims made for them, but vast strides, born of experience, have been made in recent years, and the equipment, demonstrated under ideal conditions at Tillington, was of a particularly high standard.

The demonstration embraced row crop machinery, small tractors and cultivators, rotary cultivators, gang mowers and grass-cutting machines, transplanters, and orchard spraying and dusting machines.

Among a prolific crop of two and three-wheeled tractors and cultivators, the Newman three-wheeler (now obtainable with petrol or diesel engine) was having its first public outing in this part of the country. The new four-wheeled Garner performed admirably and impressed a large following as an ideal medium for inter-row and light cultivations, while the four-wheeled Trusty proved itself a useful addition to the famous range.

Other interesting machines in this section were the Pegasus Unitractor, with the engine inside its single wheel; the new Mayfield, a two-wheeled tractor with mowing attachment; the latest Ransome M.G.5, with its 6 h.p. engine and rubber-jointed tracks, giving low soil pressure; the Colwood and the Barford Atom, with their many attachments; the B.M.B., British Anzani, Coleby Cultivator, the Goodwood Motor Cultivator, Gravely, Gunsmith, Rowtrac, Troy, Wild, and Wrigley.

Though the acreage of vegetables in Herefordshire is not large, growers, faced with increasing costs of labour, are looking to transplanting machines to reduce their expenses. There were three on view—the Quickstart, the Robot, and the Teagle—and the main points noted about all three were their simplicity of construction and operation and their efficiency at tractor speed. Where soil and other

conditions are suitable, there can be no doubt about the effectiveness of these transplanters as labour-savers.

The rotary cultivator section included among many others the Clifford, the Gem rotary hoe and the Rototiller, the last mentioned a pioneer of this method of cultivation. The Clifford is being marketed in no fewer than seven models.

The larger tractors demonstrated were

all old friends of the farming industry, and all are extensively used in Herefordshire. At Tillington they displayed their versatility in the market garden, all of them being equipped for inter-row work. They included the David Brown, the Ferguson, the Fordson, the Bristol, and the new Nuffield, designed by Dr. Merritt, who was responsible for some of our most successful tanks during the war and now works in other fields.

As yet in Herefordshire the mowing of grass under orchard trees, instead of grazing, is not widely practised. For the specialist fruit-grower and the owners of bush cider orchards, however, there was a display of gang mowers and smaller cutters. The Allen motor scythe, the Green gang mower, the Coleby, the Gravely, the Troy and the Ransome grass cutters were among those put through their paces.

Amid a galaxy of spraying machines, the K.E.F. Autoblaster probably attracted most attention because of its modern design, but efficient sprayers, large and small, also demonstrated, included Craven, Auto-Culto, Clifford, Lister, Drake and Fletcher, Watson's, Week's, Pest Control, Edwinton Friend, Trusty, Coleby, Hymatic, Ransome's and Fortemist.

With the commercial dusting machines demonstrated was a new duster which has been designed and made at Long Ashton Research Station, in which the dust is distributed by a fan.

N.F.U. Final Frost Report

Damage Not Great: Warm Rain Will Compensate Loss In A Few Months

ON the whole, the effect of the frost damage to fruit is not nearly so bad as it was at first feared, said Mr. Giles Tucker, at a press conference at Bedford Square on Monday. Growers in hollows and frost pockets had suffered a bad loss in some cases, but looked at from the national standpoint, the loss was not great, and given some warm rain now, the effect would soon be forgotten.

Another urgent need for warm rain

was to offset the drought, which was on the verge of becoming serious. If rain did not come soon, the drought was bound to have a bad effect on fruit crops in most areas.

A final survey of the frost damage was issued, "because of the alarming individual reports which have appeared—some fruit-growers are apt to become unduly alarmed," Mr. Tucker said. The report gave the following information from the main fruit-growing areas:

South Hampshire: Unable to give accurate report—damage up-to-date not extensive.

Essex and East Sussex: Some damage, solely in low-lying areas.

Worcester: Nothing serious. Gloucestershire, North Lincs. and Herefordshire: No report of damage.

Suffolk: Some damage (severe locally in the case of plums) to black currants, apples, strawberries, pears and gooseberries. No damage to cherries.

Norfolk: Some damage, especially to soft fruits. Fruit also suffering from effects of drought and cold winds.

Cambridgeshire: Effects of frost very mixed—in the Wisbech area there is severe damage, particularly to potatoes and gooseberries in low places only. Strawberries little damage. Apples virtually no damage. Victoria plums—only a few frosted.

Kent: Some damage to apples—cold winds have interfered with setting. Local damage to strawberries and pears.

Dorset: No reports of setbacks due to frosts.

Devon: Some frost damage to plums, but apples have escaped. Raspberries and strawberries badly in need of rain.

Steady, Fruit Growers!

FOLLOWING the May 8 frost, when not a few of the national papers declared fruit crop prospects were decidedly grim, one Fleet Street daily appeared on May 16 with details of the experimental frost fan at the N.I.A.E. H.Q., Silsoe. It was stated that "it was intended to proceed on a semi-commercial basis next spring."

Far from meaning that the fan will be in commercial production for the 1950 season, it will be some time before it is manufactured.

In the words of Mr. E. R. Hoare, horticultural officer at Wrest Park, this is the position: "What is meant is that we shall approach East Malling and Wisley next season, and point out that we consider the fan is now ready for them to test out on a fruit-production basis. There is no question of commercial production. That will depend on the reports from the testing stations."

So there's plenty of time, fruit-growers—and no need to rush!

VIEWPOINT

CRITICISMS of lack of activity by the Horticultural Committee of the Agricultural Co-operative Society, made at the recent London gathering of that body, appear to be rather more than one of the periodic storms which bestir the teacups at annual meetings.

Often these outbursts are little but the indignant expression of a strong personal opinion, yet in the present case there seems more likelihood that the deprecations were a manifestation of a growing sense of bewilderment, even frustration, existing among some of the horticultural co-operatives in this country.

It is not altogether surprising. The membership of these bodies comprises individual growers who, from pitting their wits against the vagaries of individual marketing, have turned to the benefits of acting collectively.

Yet, just as their own individual problems found solution in co-operation, so now the co-operatives themselves find a general marketing position growing more and more complex, with some measure of co-ordination becoming a vital need. The co-operatives, in fact, are anxious to co-operate, since it represents the logical development of the basic ideal.

TWO pressing problems arise. First, can the existing fabric of the A.C.A. be so enlarged that horticulture can have close and vigorous specialist treatment, with the ultimate aim of achieving a united national co-operative network?

If not, or if there is any risk that horticulture must take second place to general agriculture which, so far as marketing is concerned, cannot have the same or even such pressing problems, does the future lie with a separate Horticultural Co-operative Association?

This, in effect, would obviously constitute a trade body with such a future that it could not be overlooked in questions of consultations and negotiations. Such an organisation might be frowned upon by the N.F.U., both from the standpoint of divided representation and the principle of not separating horticulture from agriculture.

Nevertheless, particularly since the N.F.U. has established its own section to stimulate the growth of co-operative marketing, we feel careful consideration of the entire position cannot be long delayed. The rapid growth of horticultural co-operatives, without any market cohesion or central guiding body dealing specifically with horticultural problems, might easily lead to a chaotic situation.

Whatever course is finally adopted, and although it might appear to transgress the cardinal principle that horticulture and agriculture must go hand in hand, it would seem the height of folly ever to assume that horticultural co-operative marketing matters can be dealt with other than on a strictly specialist basis.

AS part of the final solution to marketing perplexities, the close co-operation of the co-operatives is bound to come. The desire already exists in certain quarters; but so far it is only awakening. It is doubtful if there would yet be any wholehearted financial support for what would prove a costly national machine.

Continued steady growth of co-operatives will solve that, by an increased spread-over of costs; and the time to visualise the eventual set-up is now.

FLOWER CORNER

More About The Alstroemeria

By W. E. Shewell-Cooper, M.B.E., N.D.H., F.L.S., Dip.Hort.(Wye)

THE most common species of Alstroemeria grown as a cut flower to-day is aurantiaca. A. chilensis bears flowers on stems only 2ft. long and so is not really suitable as a cut flower; nor is it, on the whole, so free flowering. I only wish it was, as there are many lovely colours to be had from this species. I am looking forward to the time when I can buy large quantities of the Ligtu hybrids, because these throw flowers on stems 3ft. long, in many brilliant colours. I long to grow these Ligtus in large quantities, for those that have been sold have made very good money indeed. Of the A. aurantiaca, Dover Orange seems to be one of the best colours.

Previously, I have dealt with the manuring of the ground and the application of fertilisers for these flowers, but once the plants are in position it is important to apply mulches over the beds each season, and this is done, as a rule, the moment the plants have died down and the bed is cleared. There is a lot, however, to be said for applying the mulch early in the month of June, and if horticultural peat can be used the weeds will be smothered and gradually such organic matter will be worked or work itself into the ground. Worms play a great part, incidentally, in dragging mulching material into the soil.

Sawdust Effective

Twenty years ago leafmould was always used for the purpose. Last year I saw sawdust used with great effect, and on other flower farms, spent hops, well-rotted compost, and cut grass. Northerners say it is worth while giving peat as a top-dressing in the late autumn, to protect the roots against a severe winter.

Alstroemeria does not come up in straight lines in the beds. The shoots appear through the ground anywhere they please, and this means that all hoeing must cease the moment the growths are seen. It is possible to carry out a kind of light harrowing between the so-called "rows," or, in fact, over them, early in the season, but the moment the shoots are an inch or so above the ground even this must cease. One of the problems about the beds is that the plants will ramble, and it is necessary to be careful to cut away the runners which develop outside the outline of the 4ft. bed. The plants which are cut off can be used for further beds, or thrown on the compost heap to rot down for manure.

If any of the flowers should not be cut for some reason or another, it is important to remove the heads before seed-pods are formed, and the moment the leaves turn yellow the stems may be cut down to ground level. When all the stems have been removed the bed can be harrowed over and be thoroughly cleaned for the winter, and it is then that Northerners apply the peat top-dressing.

There are two main methods of planting. One refers largely to the small grower, where the 4ft. bed is convenient. A 2ft. path is arranged between the beds so that women can do all the picking from the paths without walking among the plants themselves. Just before the war, however, I came across a number of

growers who had adopted quite a different system. They were growing this flower on a large scale, and they arranged their rows 4ft. apart, planting the tubers about 9ins. deep in ridges got out with a double-sided plough for the purpose. The plants were then allowed to spread outwards and so form their own bed, so to speak.

The rows, however, must never be allowed to encroach on one another, and the scheme most growers adopt is to use a rotary cultivator of some kind between the rows and so cut up any growths which tend to mingle with those of the next row. It is just a matter of taking the cultivator straight up the middle area in between the two rows, so as to form a strip of what might be called "No-man's Land." It is said that by this system much longer stems with larger flowers can be produced.

As to propagation, it is usually done by the division of tubers in February or early March. If you are buying tubers it is usual to purchase them by the bushel. Once, however, you have your own bed, it is a simple matter to propagate, and much can be done, I am sure, by selection; specially good plants should be marked and the tubers saved from these. I never recommend the sowing of seeds, though this is possible, but the trouble is that you have to wait so long and there is a good deal of handling too. A glasshouse is necessary, the seed being sown about the beginning of September, so as to produce seedlings by the end of May, in the north, or the beginning of this month in the south.

The main cut of Alstroemeria occurs in July, though in very early seasons they may be marketed in June. In the north of England, arrange 12 spikes to a bunch, with three blooms in four tiers, but for Covent Garden bunches of 36's are often the rule. Study the market, therefore, before despatching the flowers.

"Multi-Span" Makes Its Bow

The Waldor "Multi-Span" glasshouse—the latest addition to the Waldor range—was on view for the first time in England at the B.I.F., Castle Bromwich. Mr. N. Ferguson, sales manager, reported world-wide interest—with enquiries from New Zealand, Canada, South Africa, Hong Kong, India, Malaya, Denmark, Iceland and Egypt—although most came from home growers.

The Multi-Span house—of which a two-bay section was shown—embodies several novel features, including simplified ventilating gear with ample ventilation all round for temperature control; crop bars fitted as standard; lack of internal obstruction, giving maximum cultivation space and freedom of movement; capacious and strong guttering. Any area can be covered from 49ft. 1½in. long (2-bay) by 36ft. 4½in. upwards by extensions in either direction.

Two ranges of twin bays have already been completed in the Channel Islands, where growers have been impressed by the speed with which the houses have

Horticulture At The Devon County

Blaze Of Colour Introduces Competitive Classes For First Time In Show's History

FOR the first time since its inception in 1872, competitive classes in horticulture were a prominent feature at this year's three-day Devon County Show, held in the 60-acre Stover Park, near Newton Abbot.

Although floral exhibits have always formed part of the show, this year's ambitious horticultural display was noteworthy and, with its 360-ft. marquee, was claimed by Mr. M. Trendell, N.F.U. County Horticultural Secretary, the organiser, to be the biggest display in the area since 1926, when the Royal Cornwall show used a 500-ft. marquee.

Not content with this, Mr. Trendell and a team comprising Mr. R. V. Hepworth, Mr. H. Hosegood and Mr. D. V. J. Brock, all of the Newton Abbot Horticultural branch of the N.F.U., have even bigger aims for the future, and are firmly determined that in due course the Devon County Show shall become the outstanding event of the year in the West, so far as horticulture is concerned.

One Criticism

Yet Mr. Trendell had one small criticism to offer. The show would have been much improved if exhibitors had done more packing and grading of their produce, rather than just exhibiting. He also appealed to the Devon grower to become more show-conscious and to build up his national reputation by more effective showmanship.

Mr. Trendell estimated the number of visitors to the marquee on the first day at over 9,000. As the official figures for the first day's attendance at the show were 8,698, this suggests that some visitors returned for a second inspection of the horticultural display. Nor could they be blamed, for the whole marquee was a blaze of colour. The second day proved the most popular, and it is thought that at least 15,000 people saw Devon's horticultural effort then.

The entrance to the marquee was flanked on either side by attractively laid out rock gardens with running water, a speciality of Roseland Nurseries, Paignton, Ltd., which obtained a gold medal award.

Judging was in the hands of Mr. H. W. Abbiss, N.D.H., Mr. H. Lock, of Long Ashton, Mr. W. Lloyd McAskey, of Bicton House Gardens, Mr. R. A. Hearl, of Vespers Ltd., Devonport, and Mr. E. J. Drew, of Cornwall. The standard was high, and granting awards to the 25 trade exhibits proved difficult.

Gold awards went to Allwood Bros., of Hayward's Heath, and Napiers, Stepwater Nurseries Ltd., Taunton, for truly magnificent displays of perpetual carnations; Barr & Son, of Covent Garden, for their magnificent display of tulips in vases; E. J. Kerslake & Sons Ltd., of Newton Abbot, whose stand containing floral wreaths and large white lilies with a sombre black background was particularly striking; St. Bridget Nursery, Exeter, for an assorted display of flowers, shrubs, etc.; Hillier & Sons, of Winchester, for assorted shrubs, small trees, flowers, etc.; Orchard Nurseries, Bishopsteignton, for a display of potted hydrangeas edged with fern plants; Jarman & Co., Somerset, for rose bushes

in bloom; R. Veitch & Son Ltd., Exeter, for flowers and shrubs; and MacPenny Nurseries, Hants., who attracted much attention with a unique small rock garden containing gazanias, azaleas, rhododendrons, minute white saxifragas, miniature aubretias nestling unobtrusively under the rocks, and other rock and alpine plants. Particularly attractive in this stand were the tall spiked primulas of the Bartley strain which, being moisture-loving, were placed close to the running stream.

Vegetables predominated at the N.F.U. stand of Devon-grown produce, and also formed part of a display by T. R. Lock & Sons Ltd., of Yeovil.

Outstanding among the competitive horticultural classes was the prize-winning collection of salad vegetables, occupying a space not exceeding 4ft. by 2ft. 3in., by the Kenton and District Produce Association; six cucumbers by E. J. Kerslake & Sons Ltd., and a dish of 12 tomatoes by the same firm, who also won a prize for a collection of three lilies and red carnations.

Among horticultural exhibits in the extensive general farming machinery section was the recently-introduced "Homestead" irrigating frame, produced by Greville Humphris Factoring Ltd., Parkstone, Dorset, at about £42 for 210 sq. ft., and the "Geest" truck, exhibited by Messrs.

Mills & Co., Teignmouth. It has two rubber tyres, is pushed like a wheelbarrow, and costs £11 10s.

Other exhibitors in this section included the Four Oaks Spraying Machine Co., of Birmingham, Messrs. Fisons, and Gabriel Wade & English Ltd.

Apart from the gold awards, already mentioned, other awards were:

Silver Gilt: Kelway & Sons Ltd., Somerset; E. B. Champernowne, Yelverton; J. Scott & Co., Merriott, Somerset; W. C. F. Tuplin, Kingsteignton.

Silver: Devon Rosery & Fruit Farm Ltd., Torquay; T. B. Lock & Sons, Yeovil; Treseder & Co., Truro; Messrs. Wheatcrofts; C. A. Hawkins, Totnes; H. Balhatchet, Newton Abbot; R. B. Webber & Son, Newton Abbot.

Bronze: Four Winds Nursery, Georgeham; H. E. Pennett, St. Austell; Fleet Gardens Ltd., S. Devon; H. J. Eales, Newton Abbot; Ashley Sparkes, Totnes.

Winners in the competitive classes were:

Anemones packed for market, E. J. Kerslake & Sons Ltd.

Iris: 1, T. E. Apps; 2, E. J. Kerslake.

Gladioli: E. J. Kerslake.

Pot plants in 48's: T. E. Apps.

Tomatoes: 1 and 2, E. J. Kerslake; 3, W. B. Randall Ltd. and D. S. P. W. Brown Ltd.

Cucumbers: 1, E. J. Kerslake; 2, S. M. Ripley Ltd., Newton Abbot; 3, W. B. Randall Ltd., Exeter.

Strawberries: I. T. Saltmarsh, Newton Abbot.

Collection of salads: Kenton and District Produce Association.

Lettuce Trial Results

Cheshunt Varieties Do Well Under Glass: May Queen And Gloria Head List Outdoors

PRELIMINARY trials have been carried out with lettuces under glass by the N.A.A.S. Horticulture Advisory Officers in collaboration with a number of growers. The following is a summary, issued by the Ministry of Agriculture, of the results of the 1947-48 trials.

For heated trials the varieties selected were Cheshunt Early Giant, Cheshunt 5B, Cheshunt Early Ball, May Queen, Gotte a Forcer and Early French Frang (Blackpool). Seed was distributed to 21 centres in 13 counties. The design of the trials was 6 x 6 Latin squares, except at two centres, where randomised blocks were used.

At most centres several cuttings were taken before the crop was cleared, but at some only one cutting, and in these cases May Queen, and to a lesser extent Blackpool, were not ready. Under very good light conditions May Queen matured earlier in comparison with the "short day" Cheshunt varieties than under poor light conditions.

Figures for weight of marketable produce (grand mean) were May Queen 8.61 tons per acre, Early Giant 8.53, 5B 8.01, Early Ball 7.62, Blackpool 7.35, and Gotte a Forcer 6.02.

On a basis of marking for earliness, overall size, size and firmness of heart, leaf texture and core size, the Cheshunt varieties head the list, Early Giant and 5B being about equal, with Early Ball third. Gotte a Forcer was at a disadvantage, particularly in total weight comparisons, owing to its smaller size. 5B

was a little earlier in maturing than Early Giant. Blackpool was good generally, but was not very firm in the heart, and was a little later in maturing than the Cheshunt varieties.

Further trials are intended with varieties Early Giant, 5B, Blackpool, and Gotte a Forcer, the last with closer spacing.

Varieties selected for unheated trials were May Queen, Cheshunt Early Ball, Arctic King, Winter Crop, Northern Queen, Attractie and Gloria. Seed was distributed to 17 centres. The design of the trials was 7 x 7 Latin squares and randomised blocks.

Gloria was on the whole the best cropper with a high percentage of marketable produce. The hearts were good and it matured early, but slight susceptibility to botrytis was recorded. May Queen also did well in all respects and was little affected by disease. Attractie and Northern Queen were good on the whole, Attractie being better in respect of marketable number and heart size. Winter Crop, although the largest lettuce, did not heart satisfactorily and matured late. Early Ball hearted well and was earlier, but small in size. Mean figures for marketing of all market qualities at five centres: May Queen 8.5, Gloria 8.4, Early Ball 8.0, Attractie 7.9, Northern Queen 7.6, Arctic King 6.7, Winter Crop 6.0.

Further trials are intended in the future with varieties May Queen, Gloria, Attractie and Early Ball, the last with closer spacing.

FOR THE PACK HOUSE**New British Apple Grader****Manufacturers Claim Accurate Sorting At Low Cost With Full Care Of Handling**

FOLLOWING extensive and successful tests, a new apple grader using the weight principle for the sizing of fruit, regardless of shape or irregularity, is now being produced by Mather & Platt Ltd., of Park Works, Manchester, 10, and one of the first of these machines has been installed at the packing sheds of Fruit Packers (Essex) Ltd., Witham.

A feature of the machine is that it can be extended at will by the addition of standard units to provide a grader of any size, thus permitting extensions arising from an increased grading through-put following the date of installation.

Accurate sorting and grading is claimed at low cost and, for care of handling, soft rubber padding is incorporated at all points where bruising might occur.

In operation, two orchard boxes from a roller conveyor are delivered to a shelf alongside the machine and draw sideways to the discharge point. A hinged lid of stainless metal is then lowered over the top of each box, and a special catch keeps this in position while the boxes are tipped. Fruit flows to the conveyor belt through a gap in the lid. By a counter-balance arrangement on a tilting frame, it is unnecessary for the operator feeding the machine actually to lift the boxes, which is done by the simple manipulation of a tilting handle. The aim here is to secure maximum output by eliminating the fatigue which might prevent one man from keeping the machine fully burdened.

An Even Layer

The endless conveyor belt carries the fruit forward in an evenly dispersed layer to the small apple belts. All undersized fruit then drops into orchard boxes below, the remainder passing to the sorting tables.

These sorting tables are of the return-flow belt pattern, and the fruit is carried in front of the sorters upon a 7in. wide belt. All fruit not removed at the first passage is returned on a 5in. belt and recirculated until dealt with.

As removed the fruit is graded by sorters and either placed on overhead conveyor belts or into carrier cups, according to quality. Culls are dropped into chutes in a convenient position beside the sorters or, as an alternative, a central cull return belt, discharging into small apple boxes on a feed section, may be fitted.

The pressed aluminium-alloy carrier cups are light and rustproof, and are shaped for the accurate positioning of the fruit, and "dished" to conform to their contour.

The sizing section consists of a number of balance points, where fruit is discharged into circular rotating bins. The balances are set to discharge the weight of fruit required and the carrier cup lowers it gently to a conveyor belt immediately below the cup line. From this belt it is shunted by a padded stripper bar to an apron hanging into the rotary bins.

No Dropping

These bins, also of aluminium-alloy, are fitted with a floating spring-loaded bottom which lowers gently as each bin fills with fruit. This ensures that there is no dropping of the fruit, but only a gentle rolling motion, while the constant height of the top lay facilitates the work of the packer. Bruising is prevented by soft rubber sponge padding.

On larger machines a centre feed section can be incorporated, which automatically feeds the fruit into the carrier cups for sizing purposes. This regulates the flow of fruit from the delivery belt and places it into the cups, while excess fruit is shunted to other belts and returned to the sorting table. The section also includes a small apple discharge chute, delivering into standard orchard boxes.

The machine is driven by means of a worm and bevel gear, from an overhead motor, through vee belting. A variable pitch motor pulley can be supplied to permit adjustments in the operational speed of the machine.

Roller chains are used throughout, and

the main carrier cup chain is of a large pitch and rolls within the machine. The aim is to provide smooth, quiet drive and to minimise wear on chains and tracks.

In designing the machine the object has been to produce a grader which will handle the most tender varieties and provide accurate sorting and grading at low cost. Loading shelf, sorting table, rotary bins and delivery belts are all arranged at convenient handling heights, and operators are called upon to carry out only the simplest repetition movements, so that inexperienced labour can quickly gain a high output.

To Study U.S. Pack Houses

LEAVING London by air on Thursday next for the United States, is Mr. Howard Leicester, F.R.I.B.A., the packing station architect.

He will be away a month, but it is understood that his visit is directly connected with packing station developments planned for this country at an early date.

With the approval of the Ministry of Agriculture, a comprehensive tour in the U.S. has been arranged through the American Department of Commerce, and the British agricultural attaché at Washington will render assistance.

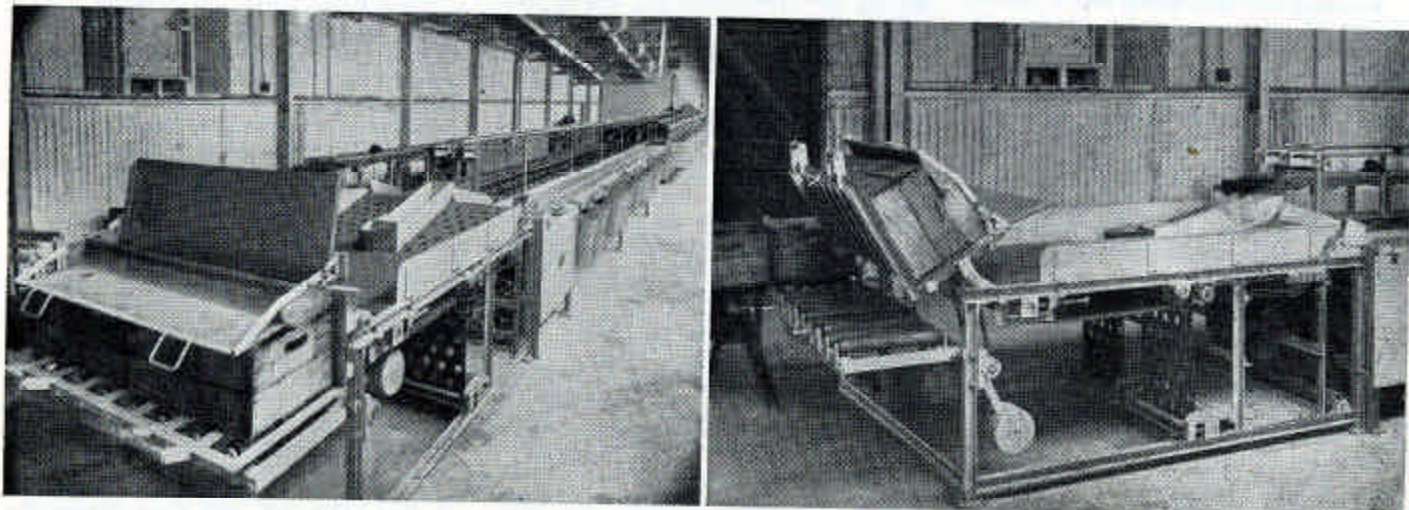
Invited to comment on the trip, Mr. Leicester told a *Fruit-Grower* reporter: "I am not at liberty to discuss the matter, but obviously this is not a question of holiday-making. In fact, it is in connection with projects already planned, to which considerable importance is attached. You may take it that my visit will not be without repercussions in connection with packing and grading at home."

Simplified Daffodils

The R.H.S. have revised and simplified their system of daffodil classification, the principal changes being as follows:

Varieties in the Leedsii Division have been transferred to Divisions two and three, Divisions two and three have been re-named, the names "Incomparabilis" and "Barrii" being replaced by "Large-cupped Narcissi" and "Small-cupped Narcissi."

Divisions two and three have been provided with a third Sub-Division, lettered (c), for varieties which are white or whitish and have hitherto been classified as Leedsii Varieties.



Left: A view looking along the new machine. Right: Close-up of the counterbalanced tilting frame.

SOIL EROSION RISKS

The Problem Is Not Being Tackled

Government Doing Little To Insist On Conservation of Britain's Food Producing Land

AFTER asking his audience to consider what connection there was between soil erosion and lack of organics, Mr. W. B. Shewell-Cooper, principal of the Horticultural Educational and Advisory Bureau, Swanley, Kent, recently told British fertiliser manufacturers that he did not consider the Government were doing enough to insist on the conservation of soil in Great Britain. Little was being done to tackle our soil erosion problem.

Mr. Shewell-Cooper was addressing the annual conference of the Association of British Organic Fertilisers Ltd., at Malvern.

He commenced by asking members some pertinent questions. Was it true that the law of the "complete circle" must always be observed? Did nature demand that what was taken out of the soil must be put back? When the tree shed its leaves and the worms pulled them down into the ground—was that part of God's law and God's plan? Was not the basic principle, in fact, based on an adaptation of the words of the Old Book, "Humus thou art and to humus thou shalt return."

In travelling about he had looked at the Westphalian plain in Germany which he considered to be the future dust bowl of Europe. He had examined the soil in Alsace—the land in Spain—the South African plain—let alone farms in Norfolk, Cambridge, Lincoln, etc. Again and again, when erosion stared him in the face, he found that there had been no organic emphasis by the farmers and landowners. Was there any connection between erosion and lack of organics?

He next asked if members felt that soil fertility could in any way be bound up with public health, as so many well-known authorities suggested? He quoted from *The Times Review of Industry of June, 1948*, "the living soil produced rich foodstuff because it is living and not merely a culture solution. It is the virtue of the soil which builds the ramparts against disease."

Growers' Example

Pointing out that there was a definite weight of informed opinion on the subject of the organic feeding of soils, he instanced statements recently made by Lord Northbourne, J. B. Priestley, Dr. L. Dudley Stamp, and Dr. W. S. Rogers. Furthermore, the most successful market growers, men like F. A. Secrett, R. L. Scarlett and R. G. M. Wilson, were all organically minded. Those, in fact, who produced our best vegetables believed in the use of organic fertilisers and used them in a big way.

World statistics, and informed opinion of such bodies as the Food and Agriculture Organisation, were frightening. "The world is producing less food than before the war, though population continues to increase. The basis of food production is the soil of the world; each year it decreases in quantity and quality. It is being exhausted without replacing the fertility of the soil, and as a consequence the world output is in danger."

The Government were not doing

enough to insist on the conservation of the soil of this country. Little was being done with regard to tackling the British soil erosion problem, and in addition it was proposed to put down new satellite towns, which were to absorb 6,000 acres or so of land each. It was ridiculous, in his opinion, to spend land unnecessarily; food should always come first.

Why should each satellite town have 2,000 acres of parkland and over 550 acres of woodland? If that 3,000 acres could only be used for food production it would be possible to produce full rations for another 2,000 people.

It was ridiculous to say, as some people did, that the N.P.K. folk had always been organically-minded. Sir Humphrey Davy, in his lecture to the Board of Agriculture in 1802, stated quite clearly that soil was a laboratory, a place where chemical actions and reactions end. It was a world containing no micro-organisms, and Leibeg described him as "the immortal author of Agricultural Chemistry." It was Leibeg who said, "A time will come when plants growing on a field will be supplied with their appropriate manures, prepared in chemical factories . . . just as at present a few grains of quinine are given to a patient affected with fever."

Modern View

To-day there was a complete *volte face*, for Dr. J. A. Quastel, in lecturing to the Royal Institute of Chemistry in 1945, remarked that soil was "an extensive micro-biological population made up from a great number of species of bacteria and of genera of fungi actinomycetes, and algae, as well as numerous families of protozoa, nematodes, and other invertebrates."

It was undoubtedly true that what was now recognised as "the compost school" had brought to light the great value of humus in the soil, and this was undoubtedly one of the reasons why fertilisers with an organic base were so important.

Mr. A. J. McPherson, writing on January 3, 1948, said, "Wherever the humus content of the soil is high there you get the least damage by red spider." Conversation with many growers confirmed this. High humus content meant good soil texture and healthy trees—and healthy trees were the best defence against red spider.

One read, too, of Mr. Dennis Clark, the well-known fruit-grower, using 7 cwt. of hoof and horn meal per acre among his black currants, and then spreading straw thickly all over the ground at four tons to the acre. Practical fruit-growers believed in organics. In a recent lecture, Dr. W. S. Rogers said: "Organic matter in the soil is important in many ways. It is a regulator of water supply; it acts as a kind of chemical sponge; it is a reservoir of nutrients more or less ready balanced; it affects the biological condition of the soil. For instance, its effect on mycorrhiza may be important. It affects the earthworm population. It plays a most important part in maintaining soil structure, for it supplies the energy material necessary for the activity of the

micro organisms which produce crumb structure in soils. The presence of organic matter helps to prevent soil erosion. The maintenance of organic matter is the only practicable method of ensuring these soil conditions necessary for healthy plant growth, and as such is of paramount importance."

He believed that when horticulturists as a whole became organically-minded, the demand for organic fertilisers would increase tremendously. If it was true, as he had been told, that 100,000 tons were needed now, then with the acreage at present devoted to private and commercial horticulture, there should be, in four or five years' time, a demand for a million tons, especially if the yields were to be at the rate of 60 tons of good food per acre per annum, which was what the best market gardeners were producing.

The terrible deserts of North Africa, Egypt, Assyria and Babylon were deserts because men refused to study nature's methods, as a result of which there had been vengeance. Growers must be willing to learn God's lessons for the soil, or else, as Sanderson-Wells had so rightly said, our epitaph would be, "Here lies the race which raped its soil."

Evesham Trains Empty

EVESHAM growers were called upon last week to honour their promise made some time ago, when they told railway representatives: "Give us the service and we will give you the traffic." Addressing an Evesham N.F.U. branch meeting, Mr. H. Byron, goods agent for the railways at Evesham, said that if the newly-introduced services to the northern markets were to continue, growers would have to provide bigger loads of produce.

The train for Newcastle and the north-east, he said, was running well, but much of the traffic they expected was going by other means. Leeds, Sheffield and Derby were well served by the new train to the Yorkshire area, but they were lucky if they had four wagon loads.

Mr. W. F. Swift described the Leeds deliveries as marvellous, and Mr. H. F. Gould thought it would be some time before the railways would be carrying the amount of produce they hoped for.

Golf At Walton Heath

Members of the Horticultural Golfing Society were again favoured with excellent conditions for their spring meeting, held at Walton Heath, by kind permission of the Walton Heath Golf Club, on Wednesday, May 4.

Following the competitions, the annual general meeting of the Society was held and Mr. J. P. Rochford (Broxbourne) was elected captain, and Mr. J. J. Hedley Willis (London) vice-captain, for the ensuing year. The next meeting will be at Porters Park on July 6.

Land Of Bean Stalks

Unusually prolific growth of vegetables and flowers during the summer season just finished is reported from all parts of Australia. They include: onions 18in. in circumference, potatoes weighing 3lb. each, lettuce at 3½lb. and 18in. across, cabbages ranging from 35½ to 42½lb., a rhubarb plant producing sticks 5½ft. long and 7in. in circumference. Flower growers raising the Satan variety of dahlias grew bushes 11½ft. tall, with giant flowers of a deep red colour.

The N.A.A.S. Has Many Tasks

Press Visit To The Eastern Province Reveals Some Of The Problems With Which The Officers Are Faced

WITH the object of presenting a comprehensive picture of the N.A.A.S. and its functions, an invitation was extended to correspondents of the national and trade Press to investigate the work of the Eastern Province at Anstey Hall, Cambridge, last Thursday.

Welcoming the reporters, Mr. J. H. Anderson, Provincial Director, explained that the Province was the largest in the country and covered the 10 East Anglian counties. He first introduced members of his staff, including Mr. B. D. A. Tucker, Fruit Specialist, Mr. K. V. Cramp, "one of the best Horticultural Officers in this county," Dr. Dillon Weston, Plant Pathologist, and Mr. G. C. Johnson, Deputy Provincial Director.

Mr. Anderson described the constitution of the N.A.A.S. and the objects and work undertaken, placing emphasis on the importance of the District Officer, as the link between the Service and the growers. He also paid tribute to the leading growers and farmers for the help they were giving in training men for these posts, and mentioned that other countries were looking with interest at the N.A.A.S. Visitors from all over the world came to pick up ideas from the Service—a great tribute to an organisation formed only two-and-half years ago.

Descriptions of the part each officer played in the Service were given by Mr. C. V. Dadd, a District Officer, Mr. Cramp as a County Specialist, Mr. L. J. Osborne, a County Agricultural Officer, and Dr. Dillon Weston, as a Provincial Specialist.

The County Horticultural Specialist, Mr. Cramp said, was responsible for problems relating to production and marketing of fruit, flower, vegetable and glasshouse crops. The work was extremely varied, and the sort of problems arising in a normal day included cultural matters, soil investigation, manurial, pests and diseases, frost protection, marketing, machinery, and glasshouse construction and heating. Often, he added, it was necessary to visit the holding, and frequently he found the grower reluctant to give the necessary information; obtaining this was another part of his job.

He also had to lay out experimental plots, particularly in the fen-lands, cooperate with specialists in trials of new materials on the market, arrange pruning, grafting and spraying demonstrations.

In winter, he added, discussion groups, lectures and conferences had to be arranged and talks given, and in addition there were a large number of essential committee meetings to attend. Plant certification schemes provided one of the biggest headaches, especially black currants, when there was little to guide them at the time of the year inspections had to be carried out. Finally, he said, statistics were required by the Ministry and had to be compiled, while the Government training scheme also came into the sphere of activities.

The party was later given a preview of the portable aluminium show building which is to be taken round seven county shows in the Province. The horticultural bay included exhibits showing crop-

spacing to suit machinery, overhead irrigation for market garden crops, the latest methods for pest control in glass-houses, and Colorado Beetle and Silver Leaf specimens.

After lunch visitors inspected a small holding at Exning and visited Leechmere Farm, Fordham. The two-acre holding at Exning had been taken over by two ex-service trainees, Mr. L. C. Whurr and Miss P. M. Whurr, in January, 1948. They had had no previous experience in horticulture, and were first placed with Mr. R. Reader, a leading Cambridgeshire flower grower, in February, 1947. The holding was in a starved and dirty condition when taken over, although soil and site were favourable.

Now it was in a high state of product-

ivity, with a wide range of flower crops in excellent condition. At the time of purchase it was already equipped with a packing shed, a small glasshouse, pig-geries and some fruit trees, and the Whurrs were endeavouring to keep as much livestock as possible to provide manure.

Mr. Cramp pointed out that they had grown their present quality crops by sheer hard work and, since they had such a wide variety of cut flowers, could make a living from the holding without having to rely on the success or failure of a few crops. The number of varieties grown also spread out the picking, which was essential since they could not employ labour.

He gave his opinion that flowers offered a satisfactory income for those who did the job properly, which included growing, grading and packing well, but felt that some growers who had made large sums during the war with poor crops would find things difficult during the next three years.

Where Will Soft Fruit Finish ?

Grower Sees Possibility Of Another "1928 Slump"

MR. A. E. ROBERTS, comparing the soft fruit situation after the First World War with the position to-day, quotes here some interesting price levels, and warns that history is constantly repeating itself. Stocks of soft fruit were scarce then, as now; land was in demand and prices high, as they are to-day, and many newcomers, including ex-servicemen, were entering the industry, as they are once again. Yet in 1928, after a short period of high prices, disaster overtook the growers. With the added stimulus for increased production to-day, what is to happen to them by 1956, he asks?

FOR seven years after the 1914-18 war, high prices for soft fruit were maintained, until 1927, when a sharp slump set in, and two years later it hardly paid to pick the majority of soft fruits.

The wholesale prices in 1928 were approximately: black currants 3d., red currants 2½d., strawberries 3d., loganberries 3d., raspberries 3d., and gooseberries 2d. per lb. These figures compared with those for the preceding eight years show that in the main, prices dropped to about one-eighth of the original high price each year, until they reached a level which meant utter ruin for the grower.

Circumstances to-day are much the same as those prevailing after the First World War, and there is no evidence to support the theory that in seven or eight years from the cessation of the last hostilities the reward for growing these crops will be any less meagre; on the contrary, all indications point that way. The present position differs from the comparable period after the 1914-18 war only in the increased rate of re-planting, in fact the acreage of black currants has already passed that of the 1939 season.

The reasons for this rapid expansion can be given as: a greater shortage of fruit experienced in World War Two; heavier emphasis on the value of the vitamin content of fruit; the large army of advisers whose job it is to enthuse the uninitiated for better or for worse; high prices resulting from de-control after years of control at uneconomic prices and consequent diminished acres; and finally, Government focus on agriculture in general, which has attracted inexperienced men with modest capital to horticulture in particular.

If, after World War One, without this additional stimulus to increased production, disaster overtook the soft fruit

growers in seven or eight short years, to what depths of despair and ruin will the new enthusiasts sink by 1956 or before?

This prediction will inevitably come true unless our advisers can formulate some scheme of planned production, and the Government grants the means of putting those plans into practice. All honest labour is a blessing, with the single exception of labour in vain, and to grow food in a world of food shortage, in excess of the needs of that particular food, is not only labour in vain, it is a crime.

Unless and until some practical scheme of planned production is forthcoming, advice for embarking on soft fruit growing should be given with extreme care and consideration, and should be followed with even greater caution.

New Bulb Prices

Agreement has been reached between the Dutch Bulb Exporters' Association, the N.F.U., and the Bulb Distributors' Association, on the minimum export prices for Dutch bulbs in the 1949-50 season, it is announced. The prices, which are subject to ratification by the Dutch Government, are available from the N.F.U., 45, Bedford Square, London, W.C.1, or the Bulb Distributors' Association, 35, Southampton Street, Strand, W.C.2.

The latest dates for the receipt of orders in Holland are June 10 for autumn delivery and January 15, 1950, for spring delivery. Orders for novelties must be placed by May 31, 1949, it is stated.

A joint complaints committee, comprising equal representation of British and Dutch interests has been set up to investigate any complaints arising between importers and exporters of the two countries.

FROM THE DISTRICTS

Progress Reports By Our Special Correspondents

Essex

Heaters At Work—Saw Fly About —Aphis Controlled

WITHAM, May 14

THE principle topic of conversation has been frost damage. The recent cold nights (usually 3 a.m.—6 a.m.) of May 1 and 8, have had varying effects. Several growers have found it necessary to light up heaters and in one or two cases a "de-frosting" machine has been towed round and round orchards throwing out a flame which disperses the frost—temporarily only!

Undoubtedly a lot of good has been done with heaters in low lying areas. On the other hand the frost has helped in thinning out what might have been a "near-record" crop. A certain well-known grower has said that he would be well satisfied if 1 per cent. of his blossom sets!

Post blossom spraying has started this week but in some areas it has been either too windy or too cold. Perhaps next week will be nearer the mark, as most Worcesters have not yet started to shed their late blossom.

Apple saw fly has been noticed in patches; where it is prevalent growers are trying nicotine and spreader only, in the belief that it will give better control than when combined with other spraying material; egg-laying, it seems, is likely to go on for some time yet, so perhaps two applications may have to be applied.

Plums appear fairly patchy and lighter than usual—in at least one case they are having their seventh year of rest.

The recent attack of aphis in strawberries has been successfully dealt with and the plants look like producing a good healthy crop. Straw is now being put down and the army of hoes are nearing the end of their task, but in common with everything else, the strawberries need more rain yet. (Essex is now about 3 in. less compared with the reading this time last year).

There are many small areas of bright yellow where the cabbage seed is progressing. Flea Beetle has been about and applications of D.D.T. dusting have been necessary—they are very unkind, for in one instance Easter Sunday was spent applying D.D.T.

East Suffolk

Irrigation A Boon—Tomatoes Healthy—Black Currants Suffered

IPSWICH, May 14

WITH no indications of a break in the drought, those growers who have had the foresight to install irrigation equipment must be feeling very pleased with themselves this season. Early beet, carrots, turnips and lettuce will amply repay money spent on irrigation on our light lands, providing the humus content of the soil is maintained.

All the protected lettuce have been marketed and little fault can be found with the prices realised this year. The spring-planted crop is just starting to turn in and where irrigation has been carried out, is producing some nice heads, although aphis is inclined to be very troublesome on some holdings. Cloches

are now covering the earliest planting of tomatoes and Dutch lights are either on structures over tomatoes or on the flat over cucumbers, self-blanching celery or early marrows.

Bunched carrots which have had glass protection until this month are now being pulled, and are realising a good price. It is difficult to get a good coloured carrot for early bunching in this district, and many are too pale to bring top prices. Much of the early turnip crop has gone to seed, and though a lot of this may be due to the dry weather, many growers suggest that we are not getting the type of Early Milan that used to be sold before the war.

Glasshouse tomatoes are looking very healthy, and much credit for this must be attributed to the many hours of sunshine they have enjoyed lately. The earliest plantings are being picked in increasing quantities, and many anxious eyes are watching the market prices.

Black currant growers have been badly

VALLANT EFFORT!



ON a diet of brick ends, old tiles and rubble, with stagnant water from a dis-used sump at the edge of which it perilously clings, this seedling apple is putting up a brave show of blossom on a vacant site in the heart of London. Anderton's Hotel, Fleet Street, which formerly occupied the site, was demolished in 1938, and the gap has yet to be filled. Many bombs fell in the neighbourhood during the war and the seedling shows signs of an earlier serious wound about eighteen inches from ground level, probably from flying debris. Despite this the struggle for existence continued. Now, however, caterpillars and aphides threaten to achieve what bombs could not, and never were pest control measures more needed.

hit by the recent hard night frosts. On some of the lower lands, as much as 10 degrees has been recorded on several nights, and has dashed a lot of hopes of the bumper crops that were at one time anticipated.

Outbreaks of aphis are being found on isolated bushes, and these serve to stress the need for the winter tar-oil spray to be done as thoroughly as possible.

Strawberries, too, have suffered from the night frosts, though not to the same extent as the black currants. Cloched strawberries are being picked in small quantities, and the prices are very attractive, although one wonders whether they are sufficiently high to warrant keeping the cloches occupied over one crop for such a length of time.

Channel Islands

High Potato Prices—Tomato Set-back—Beetle Precautions

GUERNSEY, May 13

CONTRARY to expectations, the price of Jersey's potato crop is keeping almost up to the extremely high level set at the start of the season. So far this has averaged well over £4 per cwt., but all the same, growers are not satisfied, as the reason is that the crop itself is so small owing to the drought.

The system of buying and selling on the Jersey Weighbridge is to cease at the end of this month, and marketing on a "pool" basis, as in past years, is to be reintroduced. This entails distribution to both the local and English markets, and growers will be paid at a single rate during each price period, irrespective of the destination of their produce.

On Guernsey an interesting experiment has been carried out by the Agricultural Officer to prove his contention that clamping potatoes can be as successful there as elsewhere, despite the island growers' contention that the climate would not allow it. As a result of a test of some 150 tons, it has been found that they have kept better than those stored indoors.

The early plantings of outdoor tomatoes on Jersey caught a cold very literally from the high winds from the north-east that were prevalent last week. This has meant the loss of thousands of plants and a serious set-back to many more, as these hot dry days are proving a great contrast to the nights, which are correspondingly colder, and with the lack of rain the plants are finding it difficult to establish themselves.

Guernsey tomato growers are from today to ship again in bulk. All the opposition failed to stave off legislation to this effect, and the law is now in force. Due to delays in its operation, 90,662 baskets have already left the island consigned by their agents to individual salesmen, so those growers who prefer this system to that of "bulking" have had a good innings while prices were high. Already the position in 1950 is being discussed. It is suggested that a committee shall be set up to investigate and report on the advisability of introducing permanent legislation to regulate the control of tomato exports.

The problem of labour for glasshouses appears to have been less acute than some growers made out. Meanwhile, as a precaution, investigations have been made into the possibility of importing French workers, and though this is impracticable on any communal basis, due

to lack of accommodation, individual employers may now do so if they wish.

An arrangement has been made by the French authorities to notify Jersey immediately any Colorado Beetles are found on the Continent, and of the progress of the measures taken to combat it. This should obviate the danger of the past two years from airborne invasions.

Scotland

More Red Potatoes?—Cultivator Experiment—Jam Protest

GLASGOW, May 14

WILL the season's over-production of potatoes be beneficial to the ordinary consumer? Generally speaking, growers in Scotland consider that the answer is "yes."

A prominent Ayrshire grower stated recently that housewives preferred red varieties of ware, which had been conspicuous by their absence on the market. This is likely to be altered, for all indications show that larger acreages of the red varieties are being planted.

It is interesting to note that a multi-purpose cultivator of German manufacture and the German method of planting, ridging, and cultivating potatoes, were demonstrated last week to members of the Agricultural Machinery Sub-Committee of the Scottish Council (Development and Industry) by the designer of the machine, Professor Dencker, of Bonn.

This first test, which is being undertaken by Messrs. D. Lowe & Sons, at Monktonhall, Musselburgh, has a double purpose—to provide a comparative study of the German and British method of dealing with potatoes, and to determine what modifications may be required to fit the cultivator for Scottish conditions.

Instead of the normal drills, the machine forms a series of small depressions, digging two rows at a time. The potatoes are set by hand and covered lightly with the soil, again two rows at a time. The conversion from digger to ridger is simple and rapid.

The Central Council of the Scottish Women's Rural Institutes have expressed concern about the present standard of factory jam, of which it was alleged "the general quality is poor, the fruit standard much too low, the consistency sticky and unappetising, and the price too high." The Council is to make a demand to the Ministry of Food that as the allocation of sugar is still unchanged, better use should be made of the sugar supplied to jam factories.

Tamar Valley

Lack Of Rain—Gooseberry Picking—Tomatoes Need Water

TAMAR VALLEY, May 14

THE lack of rain is now having a very serious effect on crops in general. Recent sowings are scarcely moving at all, and even deeper rooted plants are suffering. Growers are taking the only and best precaution there is, and are keeping the hoe going, in order to create a mulch and conserve what moisture there is still in the ground.

Cuttings of winter lettuce have been heavy during the past week or so, and now the crop has been cleared. I have seen some very good beds in the Valley, but in the early spring in one or two districts as much as half of the crop was lost. This does stress the need for

adequate rotation, so that land having once grown lettuce is rested from it for as long as possible. Spring planted lettuce are looking well, and should come into cut in a week or 10 days.

Gooseberries are now being picked, but here again we had wished for a good soaking of rain in order to freshen the berries and increase weight. Saw Fly has been troublesome this year in most gardens, but I see that most growers were able to either dust or spray in time to control it. Strawberries will not be so early this year, and I think that here again the lack of rain has held up growth. There is a very fine show of apple blossom this year, and I have seen very little weevil, which usually is one of the major pests in the Valley.

At this time of the year the effects of haphazard buying of strawberry runners are illustrated by the Red Core infection on some holdings, where the dark-leaved, flagging plants which one suspects, are showing the reddish brown core in their roots. It has been strongly emphasised in the past that one cannot be too careful regarding the source of one's runners. There are good strains of strawberries which can be obtained locally, and of which full advantage should be taken. The advantage in buying in the district is that after they have been certified, one can keep an eye on the runners, and then gauge the best time for planting them.

Indoor tomatoes are looking well, and I should say that the season is about average. We should ensure during this hot weather, when the plants are evaporating a great quantity of moisture, that we are getting enough water into the soil. A periodic test with an augur or even a spade would ensure that the plants are not going dry at the roots. A good maxim is to "keep the plants growing," and I have heard it expressed by many that a check, such as dryness now, will later greatly increase troubles, such as cladosporium. Magnesium deficiency is showing up in some houses, and should be kept in check by regular sprayings with Epsom salts.

Cumb. And Westmorland

Rain Wanted—Plenty Of Bloom—Growers With The L.S.A.

CARLISLE, May 13

GROWERS in this part of the country do not usually cry out for rain; they often get too much. Just now it would be very welcome, and more than one grower is taking a serious interest in irrigation equipment.

Much attention is focussed on the forthcoming machinery demonstration at the Cumberland and Westmorland Counties' Farm School, Newton Rigg, Penrith, on May 31.

Visitors will also be able to see the new school buildings, as the first block is nearing completion.

All kinds of fruit have good displays of bloom, and the damson orchards of Westmorland were in full bloom during Easter week. A number of motor coaches brought visitors to see the display—a revival of a pre-war custom, when crowds came from Lancashire to see the blossom.

Cumberland Growers' Discussion Group paid a visit to the Crofton Land Settlement Estate on April 12—the largest of the three L.S.A. estates in Cumberland. The party numbered 40, and were welcomed by the estate manager (Mr.

Campbell) and the Horticultural Adviser (Mr. Barnard).

Items of interest at headquarters included electric soil heating equipment, which is in process of being installed to heat four rows of double Dutch light frames. If successful and an economic proposition, it will afterwards be installed on some of the tenants' holdings. The Quickpress soil pot-making machine also attracted attention, and Mr. Barnard stated that with two helpers he could make 900 soil pots per hour.

On the tenants' holdings, early glass-house lettuce had already been marketed, but some good May Queen were seen.

Leaf Mould Resister No. 1 is apparently the most popular tomato on the estate, and it is interesting to note that a number of tenants are now planting along the houses instead of in rows across, as formerly. Most of the houses on the estate are 60ft. by 25ft., and the best single crop last season was two tons seven cwt.—which works out about 68 tons per acre.

All produce from the estate is collected from the tenants' holdings, packed in a large central packing shed, and marketed in bulk at Newcastle and Glasgow. This system is beneficial to the tenants and also prevents the danger of local glutts, to the detriment of local market growers.

Supper in the packing shed, as guests of the L.S.A. tenants, concluded an enjoyable tour.

Vale Of Evesham

Plum Aphis—Vegetables Depressing—Planting Held Up

EVESHAM, May 16

THE second week in May with several sharp frosts and the wind veering to the north and east gave local growers an anxious time but fortunately no great damage resulted so far as the plum crop is concerned. Here and there a few plantations in low-lying parts caught it but even then damage was not widespread.

Perhaps of greater concern to the grower at the moment is the severe attack of plum aphis which is sweeping the plum trees. The cause is difficult to fathom. It may be the wild winter or the very dry weather we have been experiencing. In the opinion of Mr. F. J. Masters, a considerable thin-out of the crop can be expected with a big variation in the size of the fruit now in evidence. Even the fruit trees could do with some rain. Nicotine washes and dusts are being applied as conditions allow.

Among the soft fruits, strawberries have suffered the worst from the frosts. Fortunately, it remained dry or the damage would have been more heavy. It is, as yet, early to dwell much on apples or plums but apple blossom weevil and apple sucker have been reported from some parts of the Vale.

The vegetable trade remains depressing in the extreme. On all hands growers have been ploughing in acres of good quality leeks and it now looks as though considerable areas of spring cabbage will meet the same fate.

Progress with the late spring and summer crops has been retarded by the very dry conditions and recent rain came as a godsend. The ground, however, is so hard that many days of gentle rain are required to make good the deficiency. Broad beans and peas are in flower and will benefit from the moisture.

TO THE EDITOR

The Value Of A Comprehensive Pest Control Survey

I READ "Viewpoint" on May 5 with mixed feelings of sympathy and impatience. We can all understand the grower's feelings, as he sees the bewildering flow of new insecticides and fungicides, and reads often conflicting reports of their good and bad effects. And I think that the flow is likely to continue, for it is easier to find new products than to assess critically their practical value under varying conditions.

But I fear that any inclination to rebel against the "faster revolutions of the wheel" is long out-dated. The appeal to Dame Nature was forfeited when we started to plant acre after acre with one crop, particularly where, as with fruit, no rotation is possible. That alone greatly increases both the loss from a single attack and the probability of successive attacks by a pest or disease.

Counter measures must be taken to restore the balance of control, but let no one imagine that this restored balance is the one ordained by nature. It is very much less stable, and this instability is the price we must pay for the increased crops which a growing civilised population, with its high density and (would be) high-standard of living, must have.

Certainly these counter measures should be as wisely chosen as possible and, for example, should not kill off predators and pollinators.

You are entirely right as to the value of a comprehensive survey of pest control as a whole, but this would be a monumental task. It calls for the application of methods now familiar in a wide field of industry under the name of Operational Research, and would, I think, be most efficiently carried out by a mixed team of growers, scientists, and economists.

A modest attempt at such a survey, on a small scale, has been made by the Mushroom Growers' Association by setting up an Insecticides Committee to collect information on the use of new insecticides against mushroom pests; one report has been issued.

Entomologists are studying our insect population, but it takes many years to establish or detect a permanent change in its character.

Lastly I suggest that nature should not be regarded as an antagonist waiting for the last laugh. If we study nature's laws we can both avoid conflict with them, and use them to attain our own ends. Perhaps our troubles have been increased in recent years by the premature use of new materials before all their limitations are recognised.

R. L. EDWARDS, Ph.D.

Director of Research,
Mushroom Research Association,
Yaxley.

Others Please Copy!

IN your "Viewpoint" on May 5 you suggested growers should undertake "a comprehensive investigation into the entire question of pest control."

It struck me as a little ungenerous, in this connection, not to mention the efforts being made by the Mushroom Growers' Association to do this very thing—the

first report of the Insecticides Committee having been issued within the preceding 14 days!

FRED C. ATKINS.

Chairman,
Insecticides Committee,
Yaxley.

[Quite obviously we were thinking in terms of commercial horticulture as a whole, rather than of a single highly-specialised branch. However, we agree we should have been less "ungenerous" had we pointed to the work of the M.G.A. Insecticides Committee as an example to be copied in other directions.—Ed.]

Soilless Culture

IN reply to Mr. Ticquet's letter of May 5, regarding the use of ammonium sulphate in nutrient solutions, although the process described is quite correct, why introduce this salt, with the resulting complications in the nutrient, to by-pass a process which will take place normally within a healthy plant?

During a number of years of practical experience, I have never seen symptoms of carbo-hydrate deficiency when the nutrient has been formulated to suit climatic conditions.

Regarding the proportions of the element in the solution, one has to remember that selective absorption takes place up to a certain point, thus giving some degree of latitude provided the total concentration remains within reasonable limits.

Nitrogen deficiency can be remedied by decreasing potassium, but as this element is usually the dominant factor this condition should not exist if a suitable nutrient is used. Furthermore, if the deficiency is to be corrected by decreasing potassium, it means that tanks must be emptied and fresh solutions made up, therefore, why not increase the nitrogen content?

Mr. Godber, in his letter, considered I exaggerated the chemical knowledge required to carry out sand-culture. If one is using a mechanical injector, or making up concentrated stock solutions, some knowledge is necessary to avoid the precipitations and reactions which occur between the salts employed. For instance, one cannot make a concentrated solution containing calcium phosphate and sulphates without the formation of practically insoluble calcium sulphate, which clogs injector valves, pipes, etc. I stressed the chemical side in order that would-be growers will at least avoid some of the mistakes which can so easily be made, and will not contemplate the use of concentrates without due consideration.

Certainly non-scientific growers can work the system; in fact, I have seen some extremely good results produced by amateurs. Nevertheless, it is difficult to lay down any hard and fast rules, as conditions vary considerably. The type of sand employed makes it necessary to alter the technique from time to time. Some sands tend to render the iron insoluble after the nutrient has been applied, resulting in chlorosis, which may

be mistaken for a major deficiency. Therefore iron has to be applied to the sand, preferably as a separate feed at a pH of 4.5.

In connection with the suggested series of simple instructions made by Mr. J. W. Godber, this would not be an easy matter, particularly with such crops as P.E. carnations, where some adjustment in the nutrient is necessary during autumn and winter to prevent the softening of the stems. The time these adjustments are made depend on the climatic conditions.

A solution which has given satisfactory results during spring and summer with many subjects is: N. 130 ppm, K₂O 120 ppm, P₂O₅ 100 ppm, MgO 20 ppm; using calcium nitrate, potassium nitrate, superphosphate and magnesium sulphate. Sodium nitrate may be introduced to replace part of the calcium nitrate, bearing in mind that the sodium is unwanted. With tomatoes the P₂O₅ content may be beneficially reduced to 50 ppm.

Finally, although putting forward these difficulties, the results of some years work on the subject convinces me that sand culture, coupled with automatic feeding, is the solution to one of the major problems of horticulture to-day—namely the increasing cost of production.

Polegate,
Sussex.

THOMAS SAUNBY.

Electric Soil Warming

SOME considerable time has elapsed since the publication in *The Fruit-Grower* of February 24 of the article entitled "Soil Warming Experiment." Nevertheless, various comments raised during the intervening period compel me to comment on one very important point arising in the course of the article.

Your correspondent mentions—apparently quoting the manufacturer—that a loading of 5 watts per sq. ft. for normal soil warming is effective, which is indeed our experience over a very wide field.

He then, however, recommends a loading of 10 watts for "special hot-beds," whatever they may be, and goes on to suggest "15 watts for seed germination." Whatever may be covered by the term "seed germination," surely the majority of propagations of all kinds will go on over propagating beds in frames or on propagating benches in houses. With a wide experience of this class of application, I have found that complete satisfaction is obtained with loadings of 5 watts per sq. ft. The adoption, therefore, of a loading of 15 watts per sq. ft. would simply result in the grower laying out at least twice as much as he need do with the normal 5 watts recommendation.

I feel it only fair, therefore, to point this out to prospective users, who may thus be saved quite a substantial but unnecessary outlay of capital.

C. A. CAMERON BROWN.
British Electricity Authority,
London, W.1.

Midland Air Service ?

British European Airways are planning a regular cargo service for fresh fruit and vegetables from the Continent to Birmingham. The produce will be despatched from Paris within a few hours of harvesting and be on sale in Birmingham less than 24 hours later. At the moment vegetables reaching Birmingham by sea and land are sold at least three days old.

LATEST FROM THE MARKETS

(Rates quoted in these lists are market prices paid by purchasers, and may make allowances for such items as carriage, toll and portorage, and salesman's commissions. They are not prices paid to growers).

Covent Garden				
FRUIT	Per	May 14	May 7	1948 Equiv.
Currents, Red, Dutch	lb	4/6-6/0	—	—
Cherries, French	lb	2/0-2/6	3/0-4/0	2/0-4/0
— Italian	lb	1/6-2/0	—	2/0-4/0
Dates, Tunis	box	0/9-1/4	0/9-1/4	1/2-1/9
Gooseberries	lb	1/9-2/0	—	—
Lemons	box	25/0-30/0	20/0-26/0	—
— Murcia	box	18/0-20/0	18/0-20/0	—
Melons, Hothouse	each	25/0-30/0	—	—
S.A. Grapes	lb	1/8	1/8	1/8
— Pears	box 40lb	27/6-30/0	27/6-30/0	27/6-29/0
Australian Pears	case	30/0-32/0	30/0-32/0	30/0-32/0
Peaches, English	each	2/0-6/0	2/0-5/0	4/0-8/0
Strawberries, Indoor	lb	8/0-15/0	8/0-12/0	8/0-10/0
— French	lb	3/0-6/0	3/6-6/0	2/0-6/0
Almonds	lb	1/0-1/3	1/0-1/3	—
Cobnuts, Italian	lb	1/0-1/1	1/0-1/1	—
Walnuts, Dried	lb	1/6-1/9	1/6-2/0	—

VEGETABLES				
Artichokes	1-bush	2/6-3/0	2/6-3/0	3/0-3/6
Asparagus	round	2/6-4/0	4/0-6/0	5/0-7/0
— 1-fan	5/0-10/0	8/0-15/0	8/0-10/0	—
— French	bunch	4/0-5/0	5/6-7/0	—
Beans, Hothouse	lb	2/0-3/0	2/0-4/0	1/6-2/6
— Broad	lb	0/8-1/0	0/6-0/8	0/9-0/10
Beet	1-bag	3/0-4/0	3/0-4/0	5/0-6/0
— Long	box	4/0-5/0	5/0-6/0	12/0-14/0
Cabbage	mal	4/0-6/0	5/0-8/0	—
Carrots	1-bag	6/0-7/0	6/6-7/0	6/6
— Dutch, New	bunch	0/6-1/0	0/8-1/0	—
— French	lb	0/8-0/10	0/10-1/0	—
Cauliflowers	doz	8/0-12/0	4/0-8/0	6/0-8/0
— mat	12/0-18/0	4/0-8/0	12/0-18/0	—
Cucumbers	each	1/0-2/3	1/6-2/3	2/6-3/6
Chicory	lb	1/0-1/3	0/10-1/0	—
Eradices	doz	6/0-8/0	6/0-8/0	—
Garlic	lb	1/0-1/6	1/0-1/6	—
Horseradish	bundle	8/0-10/0	8/0-9/0	8/0-9/0
Leeks	lb	0/1-0/2	0/1-0/2	1/0-1/1
Lettuce	doz	4/0-8/0	4/0-9/0	3/0-8/0
— Dutch	crate	12/0-14/0	12/0-15/0	12/0-14/0
Marrow	each	2/0-3/0	2/0-3/0	—
Mint	12 bchs	2/0-6/0	6/0-10/0	—
Mustard & Cress	doz	2/6-3/0	2/6-3/0	2/6-3/0
Mushrooms, Brown	lb	3/0-4/0	3/0-4/0	4/0-5/0
— White	lb	4/0-5/0	4/0-5/0	5/0-6/0
Onions	1-bag	8/0-10/0	8/0-10/0	—
— Egyptian	cwt	20/0-25/0	28/0-30/0	Control
— Green	lb	0/11-0/2	0/11-0/2 1/2	0/7-0/7 1/2
Parsnips	1-bag	4/0-6/0	4/0-6/0	—
Peas, Italian	lb	0/9-0/10	0/6-0/7	0/10-1/0
— Guernsey	lb	2/0-2/8	—	—
— English	lb	2/0-2/8	—	1/6-2/0
Potatoes	cwt	11/3-12/9	11/3-12/9	11/0-12/6
— Ar.ian	lb	0/8-0/8 1/2	0/7-0/8	0/8-0/9
— Canary	lb	0/81-0/9	—	—
— Cornish	lb	0/8-0/9	—	1/6-1/9
— Guernsey	lb	1/0-1/3	1/0-1/9	1/9-1/9
— Jersey	lb	0/10-0/10 1/4	0/10-1/0	—
Radishes	bunch	0/2-0/4	0/2-0/4	0/3-0/4
Rhubarb	lb	0/24-0/3	0/24-0/3	0/4-0/6
Spinach	box	2/0-4/0	2/0-3/0	3/0-4/0
Spring Greens	1-bag	1/0-2/0	3/0-4/0	4/0-6/0
Swedes	1-bag	3/0-4/6	3/0-4/6	4/0-6/0
Tomatoes, Canary	cwt	35/0-45/0	35/0-42/0	18/0-22/6
— English	lb	2/6-3/6	3/0-3/6	1/9-1/10
— Channel Isles	lb	2/6-3/3	3/0-3/6	—
— Dutch	lb	2/9-3/0	3/0-3/6	—
Turrips	bchs	0/10-1/3	—	—
Watercress	12 bchs	2/6-3/0	2/6-3/6	2/6-3/6

FLOWERS				
Anemones	bunch	0/6-1/0	0/4-0/8	0/8-1/3
Arums	doz	12/0-18/0	10/0-18/0	18/0-24/0
Carnations	12 blms	8/0-10/0	4/0-6/0	8/0-10/0
— Selected	12 blms	12/0-15/0	10/0-12/0	15/0-18/0
Conflowers	bunch	1/3-1/3	—	—
Fern, Asparagus	bunch	3/0-6/0	4/0-6/0	4/0-6/0
— Sprengerii	bunch	3/0-5/0	2/6-3/6	4/0-6/0
— Stulax	bunch	6/0-8/0	6/0-8/0	—
Forget-Me-Not	bunch	1/0-2/9	—	—
Gladioli	bunch	5/0-6/0	—	—
Heather	bunch	2/0-2/6	2/0-2/6	—
Iris, Blue	doz	4/0-5/0	4/0-6/0	—
— White	doz	5/0-6/0	6/0-8/0	—
— Yellow	doz	5/0-5/6	6/0-8/0	—
Narcissi, Dble Wht	bch	1/6-2/0	—	—
Lilies of Valley	bunch	1/6-3/6	—	1/6-2/6
Polygonus	bunch	0/4-0/9	0/4-0/9	0/3-0/6
Pyrethrums	bunch	1/3-1/8	—	1/0-1/6
Roses	doz	6/0-8/0	6/0-8/0	15/0-18/0
— Selected	doz	12/0-18/0	12/0-18/0	18/0-24/0
Sweet Peas	bunch	1/0-1/6	2/0-3/0	2/0-3/0
— English	bunch	2/6-4/0	—	—
Stock	bunch	1/0-1/3	0/9-1/6	1/0-1/6
— Long	bunch	4/0-5/0	—	3/0-4/0
Tulips	bunch	1/6-2/0	—	1/3-1/9
— Selected	bunch	3/0-3/6	4/0-6/0	2/0-2/6

Spitalfields				
FRUIT	Per	May 14	May 7	1948 Equiv.
Grapes, S.A.	lb	1/8	1/8	—
Lemons	box	20/0-22/6	20/0-22/6	—
Strawberries, Fr.	pun	1/0-1/3	1/0-1/3	—
— Dutch	pun	1/9-2/0	1/9-2/0	—
VEGETABLES				
Asparagus, Eng.	bch	4/0-5/0	5/0-6/0	4/6-7/6
— French	bch	4/0-5/0	3/6-4/6	—
Beet, Long	1-bag	5/0-7/0	5/0-7/0	8/0-12/0
Cabbage	1-bag	2/0-3/6	2/0-3/6	4/0-8/0
Carrots	1-bag	6/0-7/0	5/0-6/6	6/6
Cauliflowers	crate	15/0-20/0	8/0-10/0	—
— mat	10/0-14/0	5/0-10/0	6/0-12/0	—
Mushrooms	lb	4/6-5/0	4/6-5/0	5/0-6/6
Onions, English	cwt	18/0-20/0	18/0-20/0	—
— Egyptian	cwt	19/0-22/0	28/0-32/0	—
Soyas	1-bag	2/0-3/6	2/0-3/6	—
Spring Greens	1-bag	3/0-6/0	3/0-6/0	—
Swedes	1-bag	4/0-5/0	4/0-5/0	3/0-5/0
Tomatoes, English	lb	2/9-3/3	—	—
— Canary	24lb	30/0-35/0	30/0-35/0	30/0-40/0
Watercress	12 bchs	2/0-3/0	2/0-3/0	3/0-4/0

Borough Market				
FRUIT	Per	May 14	May 7	1948 Equiv.
Almonds, Spanish	lb	1/4-1/6	1/4-1/6	—
— Jordan	lb	1/0	1/0	—
Dates, Tunis	carton	1/0-1/5	1/0-1/5	—
— Algerian	carton	0/10-0/11	0/10-0/11	—
Filberts	lb	1/0-1/1	1/0-1/1	—
Lemons	box	21/0-28/0	21/0-28/0	—
Walnuts	lb	1/8	1/10-2/0	—
VEGETABLES				
Asparagus, English	fan	12/0-14/0	—	—
Beet, Round	1-bag	3/0-4/0	3/0-4/0	4/0-6/0
— Long	1-bag	3/0-4/0	3/0-4/0	12/0-14/0
Beans, Broad	8lb	5/0	—	7/4-9/4
Cabbage	36/40lb	4/0-5/0	4/0-5/0	—
Carrots	56lb	Control	Control	—
— New	bunch	1/6-1/8	1/7-1/8	3/0-2/6
Cauliflowers	mat	6/0-8/0	3/0-7/0	—
Cucumbers, Eng.	each	1/3-2/3	1/3-2/0	1/9-2/0
— Dutch	each	1/6-2/0	1/6-2/0	—

SUMMARY

Covent Garden.—Trade brisk with keen demand for English and imported tomatoes at firm prices, with lettuce, cucumbers and other salads remaining steady. Among greens, cauliflowers firm but others slow. Roots slow except good old and new carrots and imported new potatoes. Peas steady, with hothouse beans easing on improved supplies. Fruit plentiful and in demand. Flowers steady with best carnations and roses firm.

Spitalfields.—New potatoes easing with old nearly finished. Among greens, cauliflowers firm but others plentiful and cheap. Best tomatoes remain firm and lettuce fair with spring onions and leeks in excess. Carrots firm with beet improved, but other roots slow and rhubarb plentiful.

Borough.—Cauliflowers and imported peas improved with lettuce and onions easing. Prices maintained in other lines and cabbage plentiful.

Manchester.—Trade generally improved with small quantities of imported cherries and strawberries and English gooseberries available. Salads steady with tomatoes, cucumbers, radishes and spring onions easing. Cauliflowers firm but other greens slow. New potatoes easing but old remain steady.

Pershore.—Keen trade in best lettuce and radishes, with asparagus and cabbage firm and leeks, mint, parsley, rhubarb and spinach steady. Some gooseberries available.

VEGETABLES				
Per	May 14	May 7	1948 Equiv.	
Leeks	lb	0/1	0/1	—
Lettuce, Outdoor	doz	3/0-6/0	4/0-7/0	—
Lettuce, Indoor	doz	4/0-7/0	8/0-9/0	—
— Italian, Long 12/18's	8/0-10/0	10/0-13/0	—	
Mushrooms	lb	4/0-6/0	4/0-8/0	6/0-7/0
Onions, Dutch	1-bag	8/0-10/0	12/0-14/0	—
— Egyptian	cwt	22/0-24/0	—	—
— Italian	cwt	18/0-20/0	—	—
Peas, Italian	lb	0/10-1/0	0/6-0/9	—
Potatoes, English	cwt	Control	Control	Control
— Fr. N. African	lb	0/8-0/8 1/2	0/74-0/8 1/2	—
— Jersey	lb	0/10-0/10 1/4	—	—
Rhubarb, Outdoor	lb	0/2-0/3	0/2-0/3	0/2-0/3
Spring Onions 18/20lb	doz	2/0	2/0	—
Tomatoes, Can. 24/26lb	doz	28/0-45/0	28/0-42/0	22/9
— English	lb	3/0-3/6	3/0-3/6	—
— Dutch	12lb	33/0-36/0	36/0-40/0	—
Watercress	chip	5/0-8/0	5/0-9/0	10/0-12/0

Manchester Smithfield

FRUIT				
Per	May 14	May 7	1948 Equiv.	
Cherries	lb	3/6	—	3/6-4/0
Gooseberries	lb	2/3-2/6	—	2/6
Lemons	box	26/0-25/0	30/0-25/0	—
Strawberries	lb	4/0-4/6	—	4/6-5/0
— Dutch	pun	1/9-2/0	2/0	—

VEGETABLES				
Asparagus, Fr.	bundle	4/6-4/3	—	3/0-3/8
— Formby	bundle	2/3-3/0	3/0-3/9	—
Cabbage, Spring	crate	6/0-8/0	4/0-6/0	7/0-9/0
Carrots, Dut. New	bch	1/4-1/6	1/6-2/0	2/0-2/6
— French	lb	0/10	—	—
Cauliflowers	mat	14/0-16/0	7/0-10/0	12/0-18/0
Cucumbers	each	1/9-2/0	1/3-2/0	2/3-3/0
Lettuce, English	doz	5/0-7/0	5/0-6/0	4/0-8/0
— Dutch	crate	15/0	12/0-14/0	—
Mushrooms	lb	5/6-6/0	5/0-6/0	6/0-7/0
Onions, Spring	lb	0/3-0/4	0/2-0/3	—
Peas, Italian	chip	5/0-6/6	4/6-6/0	9/0-10/0
Potatoes	cwt	12/3-13/3	12/3-13/3	Control
— Jersey	lb	0/11-0/10	0/104-0/11	—
— Algerian	lb	0/8 1/2-0/9 1/2	0/8-0/8 1/2	0/7-0/8
Radishes	12 bunches	2/0-3/0	—	1/6-2/9
Tomatoes, English	lb	3/6-4/0	4/0-4/6	—
— Guernsey	lb	2/6-3/6	—	—
— Dutch	lb	3/0-3/6	3/6-4/0	—
— Canary	24/26lb	35/0-44/0	40/0-50/0	22/9
Watercress	chip	9/0-10/0	—	10/0-12/0

Glasgow

FRUIT				
Per	May 14	May 7	1948 Equiv.	
Lemons	case	25/0	25/0	—
VEGETABLES				
Beet	56lb	7/0	7/0	—
Cabbage</				

VEGETABLES	Per	May 14	May 7	1948 Equiv.
Rhubarb	lb	0/3-0/6	0/3-0/8	0/8
Watercress	12 bchs	2/4-3/6	2/0-2/8	1/6
FLOWERS				
Anemones	bunch	0/9-0/10	0/8	1/0
Arums	each	0/6	—	—
Lily of the Valley	bch	0/6-0/9	—	—
Narcissus	bunch	0/4-0/10	0/6-1/0	0/6
Sweet Peas	bunch	1/0	1/3	—
Stocks	bunch	0/2-0/5	—	—
Tulips	bunch	0/10-1/8	1/0-1/3	1/0-2/0

Pershore Central Market

FRUIT	Per	May 14	May 7	1948 Equiv.
Gooseberries	lb	1/8	—	2/6-2/10
VEGETABLES				
Broccoli, 1st	crate	11/0	7/0-8/0	12/0-12/6
Cabbage, Spring	crate	2/0-4/3	2/8-3/6	1/0-5/9
Leeks	cwt	2/8-5/8	2/0-6/0	90/0
Lettuce	box	4/9-6/0	—	—
Mint	12 bchs	1/2	—	—
Onions, Green	lb	0/1-0/11	0/1-0/11	Control
Parsley	pot	5/0	—	—
Radishes	score	12/0-32/0	10/0-16/0	8/0-33/0
Rhubarb	lb	0/3-0/4	0/3-0/4	0/6-0/7

Pershore Co-operative Market

FRUIT	Per	May 14	May 7	1948 Equiv.
Gooseberries	lb	1/6-2/6	—	2/0-2/11
VEGETABLES				
Asparagus, Best	100	12/0-14/0	12/0-14/0	12/0-14/0
Cabbage, Best	crate	2/6-3/3	2/0-2/6	1/0-5/0
Leeks	50lb	1/6-2/6	—	36/0-65/0
Lettuce, Best	box 18	6/0-8/0	4/6-6/0	6/0-8/0
Mint, Best	12 bchs	1/6-2/0	1/6-2/0	0/9-3/0
Onions, Spring	lb	0/2-0/24	0/2-0/24	Control
— Unwashed	lb	0/1	0/1	—
Parsley	10lb	2/0-3/0	2/0-3/0	1/0-2/0
Pears, Cloche Grown	lb	2/6	—	—
Radishes, F.B.	score	30/0-35/0	14/0-16/0	15/0-38/0
Rhubarb	lb	0/3-0/4	0/3-0/4	0/3-0/6
Spinach	10lb	2/0-3/0	1/6-2/0	1/6-2/3

Evesham Central Market

VEGETABLES	Per	May 14	May 7	1948 Equiv.
Asparagus	100	25/0-55/0	—	9/0-15/6
Cabbage	crate	2/6-4/0	3/0-4/0	—
Cauliflowers	doz	10/0-12/0	—	—
Leeks	crate	1/0-1/6	1/0-2/0	2/6-4/6
Lettuce, Best	doz	4/6-6/0	2/6-4/0	0/6
Onions, Green	lb	0/14-0/2	0/1-0/2	0/8
Radishes	12 bchs	1/0-2/0	0/6-1/3	0/9-1/6
Rhubarb	lb	0/2-0/3	0/2-0/3	0/6-0/7
Sage	12 bchs	1/9-2/3	2/0-2/6	—

Evesham Smithfield Market

VEGETABLES	Per	May 14	May 7	1948 Equiv.
Asparagus	100/120 bds	7/0-11/0	9/6-13/0	7/0-17/0
Cabbage	crate	1/0-2/0	2/0-2/9	4/0-6/0
Onions, Green	lb	0/1-0/3	—	—
Parsley	net	0/9-1/0	1/0-1/6	—
Radishes	12 bchs	0/4-1/6	0/10-1/8	0/9-1/7
Rhubarb	lb	0/2-0/3	0/2-0/4	0/4-0/8

Wisbech

VEGETABLES	Per	May 14	May 7	1948 Equiv.
Potatoes, K. Edward's	ton	215/0	215/0	200/0
— Siltland	ton	210/0	210/0	195/0
— White, Siltland	ton	198/0	195/0	180/0
— Skirland	ton	190/0	190/0	175/0

Official Averages

VEGETABLES	Per	May 11	May 4	1948 Equiv.
Asparagus	100/120 bds	11/8	13/0	16/3
Beans, Forced	cwt	406/0	378/0	—
Beet	cwt	13/2	10/0	14/1
Cabbage, Spring	cwt	13/4	14/7	23/7
Carrots	cwt	14/0	13/9	12/10
Cauliflowers, Corn	cwt	22/8	17/0	—
Cucumbers	each	2/1	2/3	3/0
Leeks	cwt	13/2	12/4	122/6
Lettuce, Indoor	doz	7/8	6/1	5/8
— Outdoor	doz	4/6	3/10	—
Mushrooms	lb	3/2	5/6	6/2
Onions, Spring	cwt	30/10	29/4	67/8
Parsnips	cwt	12/8	12/0	—
Radishes, Long	12 bchs	2/6	3/6	—
— Breakfast	12 bchs	2/3	3/1	3/7
Rhubarb, Outdoor	cwt	32/2	35/1	50/0
Spinach	cwt	40/4	—	47/7
Sweeties	cwt	11/8	10/6	10/0
Tomatoes	12lb	50/0	54/0	—

Dahlia Show List

The National Dahlia Society prize schedule for their Annual Floral Meeting at the Horticultural Hall, Westminster, on September 13 and 14, is now available.

Overseas Fruit Position

ARRIVALS of South African deciduous fruit in this country during April totalled 1,210,000 packages, including 119,000 cases, boxes and trays of pears, and 53,000 boxes of apples, according to the Intelligence Bulletin of the Commonwealth Economic Committee.

From Australia, the first of this season's apples are due to arrive about May 20. Pears in April amounted to 30,000 boxes. New Zealand apples totalled 24,000 boxes during last month, and the May shipments are expected to reach 173,000 boxes.

Official reports from Holland reveal, on April 21, that the condition of hot-house tomatoes, and strawberries under glass, was generally good and yields are expected to be satisfactory. Under the recent trade agreement, imports of tomatoes from Holland this year may total up to 23,000 tons. Last year the total was 18,000 tons.

Last season's American apple crop, at a little over 90 million bushels, was 20 per cent. less than the previous season, and 22 per cent. below the ten-year average. The pear crop was 25 per cent. smaller than in 1947-48 and 13 per cent. below average, totalling 26½ million bushels.

No Evidence

Mr. T. Williams, Minister of Agriculture, refused Mr. Collins' request in the House of Commons last week to appoint a committee to inquire into the causes of the increase in plant diseases and said that there was no evidence to support the suggestion that these were due to the greater use of artificial fertilisers.

To Mr. Collins' further request that comparative results achieved by the Indore and similar methods depending on the biological basis of soil fertility should be investigated, he added that scientific opinion was unanimous that so-called artificial fertilisers should be supplemented by the addition to the soil by organic materials such as dung and compost or by the ploughing in of grass and clover swards.

Insecticides For Mushrooms

Investigations carried out by the Insecticides Committee of the Mushroom Growers' Association set up to comment upon the potentialities of D.D.T. and other insecticides in relation to mushroom growing, have now been completed and appear in pamphlet form, price 2s. 6d., from the M.G.A., Yaxley.

Reports are included on D.D.T., Gammaxane, Azobenzene, H.E.P.T., T.E.P.P., E605 (or Parathion), Velsicol 1068, Dynome II, Piperine, smoke generators, the Aerocide system and the Aerovap system. Some of the likely developments to come are also discussed and the M.G.A. offers a limited amount of free material to members wishing to undertake their own experiments.

Soft Fruit Contract Prices

No contract prices for soft fruit for processing will be recommended by the N.F.U. this year. For the benefit of small growers, however, county branches have been circulated with information collected from the main fruit growing areas, which give an indication of this season's contract prices.

Drought Retarding Crops

Reporting on the fruit and vegetable crop positions at the beginning of this month, the Ministry of Agriculture states:

Apples, pears, plums and cherries.—Blossom abundant on nearly all varieties.

Gooseberries.—Good crop forecast but rain needed. Picking will become general in June.

Strawberries.—Prospects good, rain needed.

Black currants.—Blossom abundant. Tomatoes.—Plants forward in Lea Valley and Hampshire.

Cucumbers.—Season forward. Rhubarb.—Yield reduced by lack of rain.

Lettuce.—Indoor produce declining, outdoor suffered from cold winds and drought. Cutting likely to reach peak after mid-May.

Salad onions.—Plentiful. Spring cabbage.—Growth retarded by dry weather and cold winds.

Broccoli.—Declining, will soon be confined to the north.

Broad beans.—Increased area, normal growth, good crop expected in south-west at beginning of June.

Peas, green.—Growth retarded, but germination good in most areas.

Onions.—Substantial decrease in area reported.

Information Wanted

The lack of educational facilities to enable cider apple growers to obtain adequate information on spraying, is disturbing the N.F.U., and the Ministry of Agriculture is to be asked to do all that is possible for the growers.

The N.F.U. Cider Fruit Sub-Committee have also recently considered a report of the work of Long Ashton Research Station on cider apple growing trials. It is hoped the result of these trials will offset the falling cider apple acreage in the west by enabling the fruit to be grown in Essex, Kent and other eastern counties.

More Nitrogen

Replying to Mr. Dumbleton, who asked what steps had been taken to increase the capacity for producing nitrogenous fertilisers as recommended by the Panel on Imports Substitutes of the Committee on Industrial Productivity, Mr. Herbert Morrison told the House of Commons that steps had already been taken which should result in the autumn of 1950 in a substantial increase in the production of nitrogenous fertilisers. He added that plans to increase capacity still further were now being considered.

Not Even Dehydrated!

Not a single contract resulted from approaches made to factories for the dehydration of the glut onions, complains Norfolk County N.F.U. Branch. One factory hinted that it could not offer anything like an economic price for the onions in view of the imports of dried onions allowed by the Ministry.

At headquarters it is felt that the possibility of an outlet through dehydration for the glut onions should not have been prejudiced by imports of dried onions.

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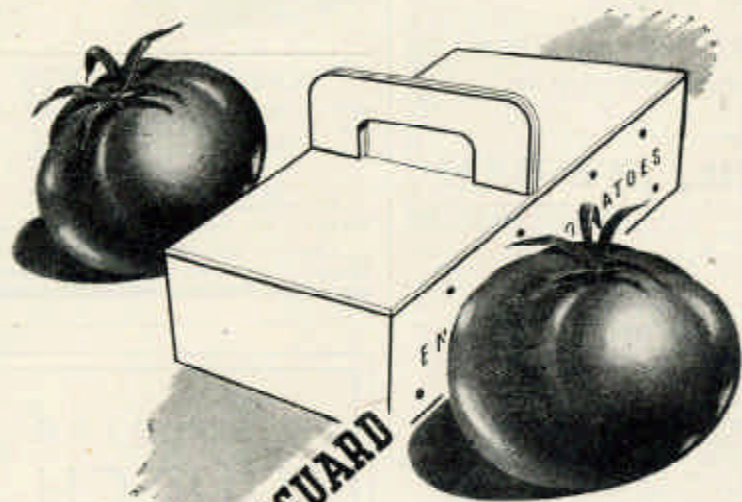
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