

## SUCKING INSECTS.

For sucking insects, such as red mite, scales, aphides, apple-leaf hopper, mealy bug, the schedule of spraying recommended is—

Period of Treatment.	Red Mite, Mealy Bug.	Scales.	Aphides.	Apple-leaf Hopper.
Dormant (July) ..	..	..	On stone - fruits : Tar-oil emulsion (1-15)	..
Bud movement (about 10th Sep- tember)	Winter oil, 3 per cent.	Winter oil, 3 per cent. (San Jose scale, 5 per cent.)	Pip-fruits : Winter oil, 3 per cent. against woolly aphis	..
Early summer ..	Lime - sulphur at appropriate dilu- tions	Lime - sulphur at appropriate dilu- tions when craw- lers on move	Lime - sulphur at appropriate dilu- tions (nicotine sulphate 1-800 may be added)	Add nicotine sul- phate 1-800 to spray should nymphs appear. Repeat 18 - 21 days later.
January and Feb- ruary	Summer oil, 1.5 per cent.	Summer oil, 1.5 per cent.	Summer oil, 1 per cent., plus nico- tine sulphate (1-800)	Summer oil, 1.5 per cent., plus nico- tine sulphate (1-800).
10 days later .. ..	Ditto .. .. Repeat if necessary	Ditto .. .. Repeat if necessary	Ditto .. .. Repeat if necessary	Ditto. Repeat if necessary.

NOTE.—For mealy-bug control nicotine sulphate 1-800 should be added to summer-oil sprays.

It is not advisable to apply oils until at least fourteen days have elapsed preceding or following sulphur or lime-sulphur sprays. If the trees are suffering from drought conditions the effects of applying an oil spray to the fruit will be to accentuate the lack of depth of colour in the fruit. In seasons of normal rainfall oil has the effect of enhancing the colour of the fruit. The application of tar-oil sprays should be confined to the "dormant" period. If this period has passed tar-oil should not be applied.

*Red Mite.*—This so far has been proved to be one of the most difficult pests to control. If over-wintering eggs are at all prevalent, it is advisable to apply winter oil (preferably quickly breaking emulsion type) at bud-movement. Thorough spraying to cover the whole surface of the tree is essential to success. During early summer lime-sulphur sprays should keep mite reasonably under control. Towards the end of January and early February apply summer oil (1-80), two applications at a ten-day interval. If live mites are still in evidence, apply one further application. Autumn females lay a phenomenal number of over-wintering eggs. If oil sprays are applied at the correct period approximating the time the commencement of laying of over-wintering eggs—which, by the way, varies from season to season—a complete kill can be obtained and no winter oil need be applied in the following spring.

*Scales* on pip and stone fruits in carefully tended orchards give little trouble.

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