

## EARLY SPRAYING FOR APPLE AND PEAR BLACK-SPOT.

### THE STAGES OF BLOSSOM-DEVELOPMENT.

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SOME confusion seems to exist among fruitgrowers, particularly amateurs and those not long engaged in the industry, on account of the multiplicity of terms used to describe the various stages of apple or pear blossom-bud development, with a resultant doubt as to the correct strength of spray to apply at a particular stage. The accompanying drawings show the various distinct stages, and may be described as in the second column of the following spray schedule:—

Key Number of Drawing.	Stage of Development.	Lime-sulphur-spray Formula.	Bordeaux-spray Formula.
1	Green-tip .. ..	1-10	} 5-4-50
2	Tight-cluster .. ..	..	
3	Open-cluster .. ..	1-25	
4	Pink .. ..	1-35	} 3-4-50
5	Full-bloom .. ..	..	
6	Petal-fall .. ..	} 1-100 to	..
7	Calyx-closed .. ..		1-120

Bordeaux at the pink stage is liable to cause russetting, and its use then is advised only on varieties very susceptible to the disease and in unfavourable positions. If Bordeaux is used at this stage an earlier bordeaux spraying could possibly be dispensed with. Due regard must be given to tenderness of variety and its liability to russetting. On less susceptible varieties and more tender ones usually two sprayings are advisable—one at the green-tip to open-cluster stage (either bordeaux, 5-4-50, or lime-sulphur, 1-10 to 1-25, according to stage of bud-development), and one at the pink stage (lime-sulphur, 1-35). Subsequent sprayings on all varieties would be lime-sulphur. Probably some slight adjustment in these spraying-strengths would be necessary to meet local requirements.

On account of some irregularity in the development of the blossom-buds it is necessary to take notice not of the most advanced, but of the majority in determining when to spray. For instance, at the pink stage some of the more advanced buds, principally those on the terminals, would be fully open, and at open-cluster a proportion of buds would be pink.