can be safely used one season may, at the same strength, scorch the foliage more or less the next season. Similar inconsistencies may be experienced at different times during the same season or in different orchards in the same district. Again, the strength 1–100, which has been found to give general satisfaction in the North Island, will at times severely scorch the foliage when used in the South Island. In the southern districts 1 in 120 is considered to be the greatest strength at which the mixture can be safely used as a general summer spray. This peculiarity, however, although calling for careful attention, is not sufficient to greatly affect the popularity of the lime-sulphur spray.

In combining lime-sulphur with arsenate of lead there are two matters worthy of attention. Either the full quantity of arsenate of lead to which the lime-sulphur is to be added should be first prepared, or the ingredients should be prepared separately and poured simultaneously into a third vessel, as in preparing Bordeaux mixture. When combined the mixture should not be allowed to stand longer than can be avoided before using, otherwise the danger of scorching is increased.

Lime-sulphur as a late winter or spring fungicide is of particular interest at present owing to the greatly increased price of bluestone. This fact will, no doubt, mean a large increase in the use of lime-sulphur.

HOME-MADE LIME-SULPHUR SOLUTION.

When used at winter strength and even when somewhat reduced, commercial lime-sulphur becomes a fairly expensive spray. This cost can, however, be reduced considerably by the orchardist preparing his own solution. If good materials are available, this can be done satisfactorily according to the following formula:—

Sulphur	100 lb.
Roche-lime (95 per cent. pure)	50 lb.
Water	50 gallons.

Slake the lime with hot water, mix the sulphur to a paste and add it to the lime, also sufficient water to make up to 50 gallons. Boil vigorously in an iron boiler of sufficient capacity to prevent waste from boiling over, and add water to replace waste from boiling, so that there will be about 50 gallons when cooked. Solutions made in this way usually register 27° to 28° Beaume. In order to secure a standard strength corresponding with the commercial solution — that is, 33° — it is essential to ascertain the specific gravity of the mixture before dilution. For