## SCHEDULE 5

## ANALYSIS OF CITRUS FRUIT TREATED WITH BIPHENYL, 2-HYDROXYBIPHENYL OR SODIUM BIPHENYL-2-YL OXIDE

## **PART III**

Quantitative analysis of the residues of 2-hydroxybiphenyl and sodium biphenyl-2-yl oxide in citrus fruit

## Reagents

- 3. The following reagents shall be used—
  - (a) 70 per centum (weight/weight) orthophosphoric acid;
  - (b) silicone-based anti-foaming emulsion;
  - (c) di-isopentyl ether (analytical reagent grade);
  - (d) purified cyclohexane: shake 3 times with a 4 per cent (weight/volume) solution of sodium hydroxide, wash 3 times with distilled water;
  - (e) 4 per centum (weight/volume) sodium hydroxide solution;
  - (f) buffer solution at pH 10.4: into a 2 litre graduated flask put 6.64 g of boric acid, 8.00 g of potassium chloride and 93.1 ml of N sodium hydroxide solution; mix and bring up to calibration mark with distilled water;
  - (g) reagent I: dissolve 1.0 g of 4-aminophenazone (4-amino-2, 3-dimethyl-1-phenyl-5-pyrazolone; 4-aminoantipyrin) in 100 ml of distilled water;
  - (h) reagent II: dissolve 2.0 g of potassium ferricyanide in 100 ml of distilled water. Reagents I and II must be kept in brown glass flasks and are only stable for approximately 14 days;
  - (j) silica gel;
  - (k) standard solution: dissolve 10 mg of pure 2-hydroxybiphenyl in 1 ml of 0.1 N NaOH; dilute to 100 ml with a 0.2 M sodium borate solution (1 ml = 100 ug 2-hydroxybiphenyl). For the standard curve, dilute 1 ml to 10 ml with the buffer solution.