

Weekend Produce Markets

A survey of Horticultural Produce for Chemical Residues

Background to the survey

The Food Section of the Department of Health has tested a large number of fresh fruits and vegetables that are sold from supermarkets and greengrocers for residues of agricultural chemicals such as pesticides and fungicides. The results show that most fresh produce from conventional retail outlets is free of residues or else has low levels well within safe limits. Results of recent testing can be found by searching for 'Pooraka Food-Care Project' at www.safoodonline.com.

Weekend produce markets, which appear to be growing in popularity near Adelaide, provide an opportunity for small-scale farmers and backyard growers to sell their produce direct to consumers. These growers may not have previously been subject to a testing program. The Food Section accordingly took a 'snapshot' of 80 samples from weekend markets to obtain a picture of how well the produce complies with legal requirements for chemical residues. If the 'snapshot' showed problems with residues intervention by the Food Section and more testing would be necessary.

Standards

A variety of chemicals are approved for use on fruit and vegetable crops to prevent or control a range of pests and fungal diseases. There are maximum residue limits set for each type of chemical that is approved for use on specific crops. The chemicals approved for use are listed in Standard 1.4.2 of the Australia New Zealand Food Standards Code. The Code can be viewed at www.foodstandards.gov.au

Which markets?

A total of 80 samples were purchased from:

- Torrens Island market
- Gepps Cross Drive-in market
- Willunga Farmers market
- Pooraka weekend market
- Junction Market



What foods were tested?

Samples included: carrots, beans, snow peas, apples, tomatoes, pears, leeks, peaches, onions, coriander, cucumber, corn, plums, silver beet, spinach, lettuce, cherries, grapes, parsley and grapes.

What did we test for?

Each sample was screened for 85 chemicals, including pesticides, herbicides, and fungicides. A total of 6,800 food and chemical combinations were examined.

Discussion of results

72 of the 80 samples (90%) were free of any residues.

All residues detected were well within the safe limits listed in the Food Standards Code:

Sample	Chemical (type)	Max Residue Limit (MRL)	Level detected
carrots	endosulphan (pesticide)	2.0 mg/kg	0.17 mg/kg
apples	Iprodione (fungicide)	3.0 mg/kg	0.84 mg/kg
apples	"	"	0.24 mg/kg
pears	"	"	0.48 mg/kg
grapes	"	"	0.57 mg/kg
peaches	"	"	1.21 mg/kg
cherries	Iprodione (fungicide)	3.0 mg/kg	2.81 mg/kg
	Procymidone (fungicide)	10.0 mg/kg	0.21 mg/kg
cherries	Iprodione (fungicide)	3.0 mg/kg	1.21 mg/kg
	Procymidone (fungicide)	10.0 mg/kg	0.17 mg/kg

The 'Snapshot Survey' found no evidence to indicate that fresh horticultural produce sold from weekend markets poses a risk to consumers from the presence of agricultural chemicals. Growers and stallholders should remain diligent to ensure that proper agricultural practices continue to be observed.