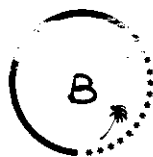


SOUTH PACIFIC COMMISSION

Quarantine Advisory Leaflet 5
1984



CUCURBITS

Latin names:	<i>Citrullus lanatus</i> — Watermelon <i>Cucumis melo</i> — Melon <i>Cucumis sativus</i> — Cucumber <i>Cucurbita pepo</i> var <i>melo</i> <i>pepo</i> — Zucchini <i>Cucurbita</i> spp. — Pumpkin
Family:	Cucurbitaceae
Closely related plants:	<i>Luffa</i> spp — Loofah <i>Momordica charantia</i> — Bitter gourd. <i>Sechum edule</i> — Choko
Trade commodity:	Fruit
Propagating material:	Seed

Quarantine Risks

Fruit

A trade in some of these fruits exists between the countries of the Region as well as with countries outside it.

Depending on the species and the country of origin fruit may be infested with such fruit flies as:

Cucumber fly (*Dacus cucumis*)
Mediterranean fruit fly (*Ceratitidis capitata*)
Melon fly (*Dacus cucurbitae*)
Oriental fruit fly (*Dacus dorsalis*)

There are some important insect pests of leaves and stems such as:

Brown weevil (*Platysemus insularis*)
Green vegetable bug (*Nezara viridula*)
Pumpkin beetles (*Aulacophora* spp.)
Serpentine leaf miner (*Liriomyza sativae*)

It is unlikely that they would be found on clean fruit. Where applicable, however, countries may require fruit to be treated to prevent further spread of such pests in the region.

The most important fungal pathogen is *Didymella bryoniae* causing gummy stem blight. This is a cosmopolitan fungus although not actually recorded in all countries of the Region. In such countries special care should be taken in fruit inspection and to ensure no stem or leaf material is included in the consignment.

Several virus diseases are recorded on cucurbits but are not considered to be of quarantine significance.

Propagating material

Seeds from reputable sources are of minimal quarantine risk.

Loan No : 3582 (B)

Quarantine Action and Treatments

Mandatory commodity treatments should normally be carried out in the exporting country.

Fruit

Fruit should be inspected and any trash or leaf tissue removed and burnt.

Fruit flies

If possible a phytosanitary certificate attesting country or area freedom from fruit flies should be obtained. Otherwise imports from fruit fly areas should be fumigated with ethylene dibromide at normal atmospheric pressure with 8 g/m³ for 2 hours at 21°C or above.

With the withdrawal of ethylene dibromide alternative treatments, which leave yet to be devised, will have to be adopted.

Pests other than fruit flies

Fumigate with methyl bromide at normal atmospheric pressure as follows:

g/m ³	time (hours)	temperature (°C)
48	2	10 — 15
40	2	16 — 20
32	2	21 — 26
24	2	27 — 32

This leaflet was prepared in collaboration with UNDP/FAO-SPC project RAS 83/001 Strengthening Plant Protection and Root Crops Development in the South Pacific and published by the SPC Plant Protection Programme, Box 2119, Suva, Fiji.

This leaflet gives general guidance only, quarantine action is subject to the legislation and regulations of individual countries of the Region.

Leaflets in this series include:

- | | |
|---------------|-------------|
| (1) Banana | (6) Orchids |
| (2) Beans | (7) Peanuts |
| (3) Cabbage | (8) Tomato |
| (4) Citrus | (9) Taro |
| (5) Cucurbits | |