



[1] *Member consultation 2011*

[2]

This phytosanitary treatment was adopted by the Commission on Phytosanitary Measures in --- 201-.

The annex is a prescriptive part of ISPM 28:2007.

[3]

DRAFT ANNEX: VAPOUR HEAT TREATMENT OF *CUCUMIS MELO* VAR. *RETICULATUS* FOR *BACTROCERA CUCURBITAE*, ISPM 28:2007

[4]

Publication information

[5]

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Notes	2011-04 formatted in template. 2011-05-16 formatted for MC. Sent to translation (Fr, Es) 2011-05-16.

[6]

Scope of the treatment

[7] This treatment applies to the vapour heat treatment of *Cucumis melo* var. *reticulatus* (netted melon) fruit to result in the mortality of eggs and larvae of *Bactrocera cucurbitae* (melon fly) at the stated efficacy level¹.

[8]

Treatment description

[9] **Name of treatment** Vapour heat treatment of *Cucumis melo* var. *reticulatus* fruit for *Bactrocera cucurbitae*

[10] **Active ingredient** N/A

[11] **Treatment type** Vapour heat

[12] **Target pest** *Bactrocera cucurbitae* (Coquillett) (Diptera: Tephritidae)

[13] **Target regulated articles** Fruit of *Cucumis melo* var. *reticulatus* (Netted melon)

[14] **Treatment schedule**

[15] This schedule requires a pre-heating time of between 3 to 5 hours using saturated water vapour (of greater than 90% RH) at 46 °C to allow the core of the melons to reach the target temperature of 45 °C.

[16] Once the core temperature of the fruit reaches 45 °C, expose the melons at 46 °C using saturated water vapour (of greater than 90% RH) for 30 minutes.

[17] This treatment should be followed by cooling at ambient air temperatures.

[18] Efficacy and confidence level of the treatment is ED_{99,9922} at the 95% confidence level.

[19] The commodity temperature and relative humidity should be monitored during treatment and should not fall below the stated level.

[20]

Other relevant information

[21] Following treatment, fruit was not artificially cooled.

[22] In evaluating this treatment, the TPPT considered issues associated with treatments based on temperature, taking into account the work of Hallman and Mangan (1997).

[23] This schedule was based on the work of Iwata *et al.*, 1990.

[24] This schedule was developed using cultivar “Earl’s Favourite”.

[25]

References

Hallman, G.J. & Mangan, R.L. 1997. Concerns with temperature quarantine treatment research. *In* Proceedings of the 1997 Annual International Research Conference on Methyl Bromide Alternatives and Emissions Reduction, San Diego, California, USA. Available at <http://www.mbao.org/mbrpro97.html> (accessed September 2010).

Iwata, M., Sunagawa, K., Kume, K. & Ishikawa, A. 1990. Efficacy of vapour heat treatment on netted melon infested with melon fly, *Dacus cucurbitae*, Coquillett (*Diptera: Tephritidae*). Research Bulletin of the Plant Protection Service, Japan, 26:45–49.

[26] 1 The scope of phytosanitary treatments does not include issues related to pesticide registration or other domestic requirements for approval of treatments. Treatments also do not provide information on specific effects on human health or food safety, which should be addressed using domestic procedures prior to approval of a treatment. In addition, potential effects of treatments on product quality are considered for some host commodities before their international adoption. However, evaluation of any effects of a treatment on the quality of commodities may require additional consideration. There is no obligation for a contracting party to approve, register or adopt the treatments for use in its territory.