Netherlands Food and Consumer
Product Safety Authority
Ministry of Economic Affairs

National Plant Protection Organization, the Netherlands

Quick scan number: QS.Ent.2013.10

	Quick scan date: 10–09-2013	
1	What is the scientific name (if possible up to species level + author, also include (sub)family and order) and English/common name of the organism? *Add picture of organism/damage if available and publication allowed*.	*Frankliniella insularis* (Franklin, 1908) Thysanoptera (tripsen): Thripidae: Thripinae
2	What prompted this quick scan? *Organism detected in produce for import, export, in cultivation, nature, mentioned in publications, e.g. EPPO alert list, etc.*	Interception on *Dolichos lablab* (valor bean, vegetable, Fabaceae), import from the Dominican Republic, 4-9-2013.
3	What is the (most likely) area of distribution?	Neotropic and partly nearctic: Argentina to USA (Arizona, Texas, Florida) (1). Incursion has been reported in Hawaii (2). Records from Bermuda, Fiji and Singapore may just be interceptions; the identification of specimens from India have not been verified. Several records from Australia before 1940 were misidentifications (3)
4	Has the organism been detected, sighted and/or has it established itself in nearby countries (DE, BE, LU, FR, UK) *Yes/no. If 'yes', provide details. No interceptions*	No
5	Does the organism cause any kind of plant damage in the current area of distribution and/or does the consignment demonstrate damage suspected to have been caused by this organism? *Yes/no + host plants + short explanation of symptoms.* *Please indicate also when the organism is otherwise harmful (e.g. predator, human/veterinary pathogen vector, etc.).*	Yes, a pod was damaged at the inner side by the thrips (especially by larvae). *F. insularis* is regarded as a minor pest of Fabaceae (4), but can also occur in high numbers causing damage to flowers of different plant species (e.g. *Citrus*, peach nectarine) (5)

6	Indicate the (provisional) probability of establishment of the organism in the Netherlands regarding climate and ecology. a. In greenhouses (low, medium, high) b. Outdoors (low, medium, high) c. Otherwise (e.g. storage facilities, human environment) *Please illustrate with information/references*	b. low to medium risk, because no outbreaks in greenhouses have been reported. However, some of the possible host plants (such as *Capsicum annuum*, *Phaseolus* and *Rosa*) are cultivated in greenhouses (see under 8). The species has been reported in diverse thrips populations for example in Brasil in roses in greenhouses (11). The problem is that specific features (e.g. damage, reproduction) can only rarely be attributed to a specific species in such diverse populations and no research is known on the specific features of *F. insularis* within such populations.
7	If the organism would become established in the Netherlands, what kind of damage would it likely cause ? *Indicate whether damage is expected to be comparable or different to that in area of present distribution : see question 5.*	Flower damage and fruit damage in several crops
8	Which commercially grown host plants are present and which host plants are present in the natural environment in the Netherlands? *If establishment is restricted to greenhouse climate, list only host plants in greenhouses.*	It is not clear which plants are actually hosts. Recorded are *Cajanus cajan* (pigeon pea), *Capsicum annuum* (bell pepper), *Carica papaya* (papaw), *Citrus*, *Cocos nucifera* (coconut), *Ipomoea batatas* (sweet potato), *Maranta arundinacea* (West Indian arrowroot), *Musa* (banana), *Nicotiana tabacum* (tobacco), *Phaseolus* (beans) and *Rosa* (rose) (6, 11).
9	Provide a provisional estimation of type and probable amount of direct and indirect economic damage (e.g. lower quality, lower production, export restrictions, threat to biodiversity, etc.) likely to occur if the organism would become established?	Export restrictions may be possible. It is a regulated plant pest in Korea (7), Japan (8), Israel (9) and Australia (10).
10	What are the possibilities of spreading, either by natural dispersal or human activity?	During warm weather conditions, this thrips can fly long distances, but it will not be active below about 5°C. It cannot survive periods with frost. In heated greenhouses, this thrips may be able to establish. Spread between glasshouses will mostly rely on movement of infested plant material.
11	In what manner could the organism enter the Netherlands? *Mention pathways*.	The pest may enter with import of cut flowers, vegetables and fruits and probably also with plants for planting. Records of interceptions are relatively scarce taken into account its common occurrence in Central America and the Caribbean.
12	Has the organism been detected on/in a product (cut flowers, fruit…) destined for the consumer market? *If "no", please go to question 14*	Yes
13	If the organism has been found on/in product other	The risk of transfer from a product intended for consumption to a glasshouse crop where it can

	than plants for planting (e.g. cut flowers, fruit, vegetables), are there any risks of introduction and establishment in crop areas and/or natural environment in the Netherlands?	establish is low unless the product would be sorted/packed close to a glasshouse crop.
14	Additional remarks	
15	References:	1. Wang CL, Lin FC, Chiu YC & Shih HT (2010) Species of *Frankliniella* Trybom (Thysanoptera: Thripidae) from the Asian-Pacific Area Zoological Studies 49(6): 824-838. http://zoolstud.sinica.edu.tw/Journals/49.6/824.pdf [6-9-2013] 2. Kumashiro BR, Nishida GM & Beardsle JW (2001) Listings of new state records of immigrant insects in the Hawaiian Islands for the Years 1991-1998 Proc. Hawaiian Entomol. Soc. 35:157-169. http://scholarspace.manoa.hawaii.edu/bitstream/handle/10125/26010/PHES35_157-169.pdf?sequence=1 [7-9-2013] 3. Sakimura K (1960) The present status of thrips-borne viruses. PRI Technical Paper No.276: 1-7. 4. Mound LA & Marullo R (1996) The thrips of Central and South America: an introduction (Insecta: Thysanoptera). Memoirs on Entomology, International 6: 1-487. 5. Childers CC, Beshear RJ, Brushwien R , & Denmark HA (1990) Thrips (Thysanoptera) species, their occurrence and seasonal abundance on developing buds and flowers of Florida Citrus. Journal of Entomological Science 4: 601-614. 6. Schotman CYL (1989) Plant pests of quarantine importance to the Caribbean. RLAC-PROVEG, No. 61:80 pp. 7. Animal and Plant Quarantine Agency (Korea) (2011). http://pflanzengesundheit.jki.bund.de/dokumente/upload/efdf3_kr3-2011qso.pdf [6-9-2013] 8. Ministry of Agriculture, Forestry and Fisheries of Japan () Summary of Proposed Amendments of the Enforcement Ordinance of the Plant Protection Law and Concerned Public Notices http://www.acfs.go.th/FileSPS/text%20SPS%20JPN%20316pdf.pdf [7-9-2013] 9. Ministry for Primary Industries New Zealand (2012) – Importing Countries Phytosanitary Requirements Israel. http://www.biosecurity.govt.nz/files/regs/stds/icprs/israel.pdf [7-9-2013] 10. Mound L (2005) South American flower thrips (*Frankliniella insularis*) Updated on 12/26/2005 10:25:42 AM Available online: PaDIL - http://www.padil.gov.au. [7-9-2013] 11. Carvalho AR, Bueno VHP & Diniz AJF (2005). Thrips (Thysanoptera) in protected crops in Brasil. ICPC/WPRS Bulletin 28: 39-42.
16	**Conclusions**	The quick scan concerns a flower thrips, *Frankliniella insularis*, which has not been intercepted before by the NPPO of the Netherlands. Establishment outdoors is very unlikely but the species may be able to establish in glasshouses. The species is not known as a major pest in its current area of distribution (tropical and subtropical areas) and its potential impact for Dutch glasshouse crops may be limited. This assessment is, however, uncertain. The probability of introduction with import of end produce (cut flowers, fruits and vegetables) is assessed to be low.
17	**Follow-up measures**	More information will be gathered to better assess the potential impact of *F. insularis* for Dutch glasshouse crops.