This short description was prepared in the framework of the EU FP7 project DROPSA - Strategies to develop effective, innovative and practical approaches to protect major European fruit crops from pests and pathogens (grant agreement no. 613678). This pest was listed in the DROPSA alert list for *Vaccinium* fruit.

Acrobasis vaccinii (Lepidoptera: Pyralidae)

Fruit pathway: eggs are laid at the blossom/calyx end of berries, more rarely elsewhere on the fruit surface; larvae feed inside the fruit (Averill and Sylvia, 1998).

Other pathways: soil; larvae fall to the ground to pupate, plants for planting may be a pathway if they carry fruit, but also possibly because larvae move between fruit during their lifetime, as they feed on several berries (see Damage).

Uncertain pathway: plants for planting.

Hosts: Only 2 genera, *Vaccinium* and *Gaylussacia* (Averill and Sylvia, 1998), incl. *V. macrocarpon* (IPMCenters, 1998; NYS, 2014; AgricultureCanada, 2007; AgriReseauQuebec, 2015; Dixon and Hillier, 2003), *V. oxycoccus*, *V. angustifolium*, *V. vitis-idaea* (Dixon and Hillier, 2003), *V. australe*, *V. stamineum*, *V. corymbosum* (BugGuide, 2015). Roubos (2009) mentions a record for *Malus* (as 'apple'), but this was not found in other publications.

Distribution: North America: Canada, USA. In Eastern North America, it occurs from Quebec, Nova Scotia and Newfounland southwards to Florida, and westwards into parts of Wisconsin and Texas; the finding in Newfoundland is recent (Finn, 2003; AgriReseauQuebec, 2015, Dixon and Hillier, 2003). In the West, it occurs at least in Washington and British Columbia. It was recently rediscovered after 40 years absence (IPMCenters, 2000); previously small populations were recorded after accidental introduction in the 1920s (Finn, 2003).

Damage: Damage is caused by larvae. Feeding on flowers buds decreases yield and feeding on fruit causes direct losses. Each larva may eat 3-8 berries (Agriculture Canada, 2007; IPMCenters, 1998). Infested berries may ripen earlier (Agriculture Canada, 2007), they become reddish, and later dry and shrivel (IPMCenters, 1998). Larvae close/hide the opening in the berry with silk, and silk also webs berries together; berries may thus be harvested and packaged without the pest being detected, resulting in consumers finding larvae in packaged berries (Prodorutti et al., 2007; LSUAgCenter, 2010). *A. vaccinii* is a primary pest of cranberries and a serious pest of highbush blueberries (Fitzpratick, 2009 cited in NVWA, 2012). It also feeds on wild *Vaccinium*, from which it may move into commercial fields (Prodorutti et al., 2007). Losses of 50-80% are mentioned (LSUAgCenter, 2010; Finn, 2003: Prodorutti et al., 2007). It is the only pest of cranberry in Eastern Canada that requires regular application of control measures (insecticides) (Le Duc et al., 2004).

Recorded impact: High	Intercepted: Not known	Spreading/invasive: Yes
-----------------------	------------------------	-------------------------

References:

- AgricultureCanada. 2007. Crop profile for cranberry in Canada. http://www.agr.gc.ca/pmccropprofiles
- AgriReseauQuebec. 2015. Publication on cranberry, annexe 5: Identification des insectes ravageurs de la canneberge présents au Québec (Source: Insectes ravageurs de la canneberge au Québec. Guide d'identification. CETAQ 2000).
- Averill AL, Sylvia MM. 1998. Cranberry Insects of the Northeast: A Guide to Identification, Biology, and Management. UMass Extension. 112 pp.
- BugGuide. 2015. Internet Database. Identification, Images, & Information For Insects, Spiders & Their Kin For the United States & Canada. Iowa State University, 2003-2015.
- Dixon PG, Hillier NK. 2003. Insect pests of wild cranberry, *Vaccinium macrocarpon*, in Newfoundland and Labrador. Phytoprotection 83: 139-145
- Finn, E. 2003. Developing integrated pest management (IPM) techniques for managing key insect pests of blueberries in the Southeastern United States. Thesis (MSc). University of Florida.

IPM Centers. 1998. Crop Profile for Cranberries in Wisconsin. http://www.ipmcenters.org/

IPM Centers. 2000. Crop Profile for Cranberries in Washington. http://www.ipmcenters.org/

Le Duc I, Turcotte C, Allard F. 2004. Manuel de lutte intégrée de la canneberge de l'est canadien. Agriculture Canada. 148 pp.

LSUAgCenter. 2010. Cranberry Fruitworm. www.lsuagcenter.com.

- NVWA. 2012. Pest Risk Analysis for Blueberry scorch virus Including an inventory of highbush blueberry pests and diseases present in North America and absent in the Netherlands. Dirk Jan van der Gaag, Arjen Werkman & Gerard van Leeuwen. Netherlands Food and Consumer Product Safety Authority Ministry of Economic Affairs, Agriculture & Innovation
- NYS. 2014. Production Guide for Organic Blueberries. IPM Publication No. 225. New York State Integrated Pest Management Programme. http://www.nysipm.cornell.edu
- Prodorutti D, Pertot I, Giongo L, Gessler C. 2007. Highbush Blueberry: Cultivation, Protection, Breeding and Biotechnology. The European Journal of Plant Science and Biotechnology. 1(1), 44-56

Roubos CR. 2009. Monitoring and managing blueberry gall midge (Diptera: Cecidomyiidae) in rabbiteye blueberries. Thesis (PhD), University of Florida