

# Psyllids (Psyllidae: Hemiptera) on fruit plants in Latvia

**Arturs Stalažs** 

### Content



**History of research** 

**Review of fauna** 

Some news

### Introduction



#### **Order Hemiptera**

**Suborder Cicadomorpha** 

**Suborder Heteroptera** 

**Suborder Fulgoromorpha** 

**Suborder Sternorrhyncha** 

Superfamily Aleyrodoidea whiteflies

**Superfamily Aphidoidea** aphids

Superfamily Coccoidea scaleinsects

Superfamily Phylloxeroidea phylloxerans

Superfamily Psylloidea psyllids

**Family Psyllidae** 

**Family Triozidae** 

### Introduction









Attēli: http://www.cals.ncsu.edu/course/ent425/text18/plantvectors.html http://www.britishbugs.org.uk/homoptera/Psylloidea/Psylla\_pyricola.html

19th century

### **Gustav Flor**



(1829 Vecsalaca (Latvia) - 1883 Tartu (Estonia))

Gustav August Adam von Flor





#### **Gustav Flor**

# Die Rhynchoten Livlands in systematischer Folge beschrieben

Part 1 1860

Part 2 **1861** 

(including 37 psyllids for Latvia territory)

Cacopsylla mali Cacopsylla pyri

Livonia - today Northern part of Latvia and Southern part of Estonia

### Number of species



19 <sup>th</sup> century	20 <sup>th</sup> century	Totally
Flor 1861	Other authors	
37	8	45

17 after Flor no more mentioned in works of other scientists

~10 mentioned only 1 time

20th century



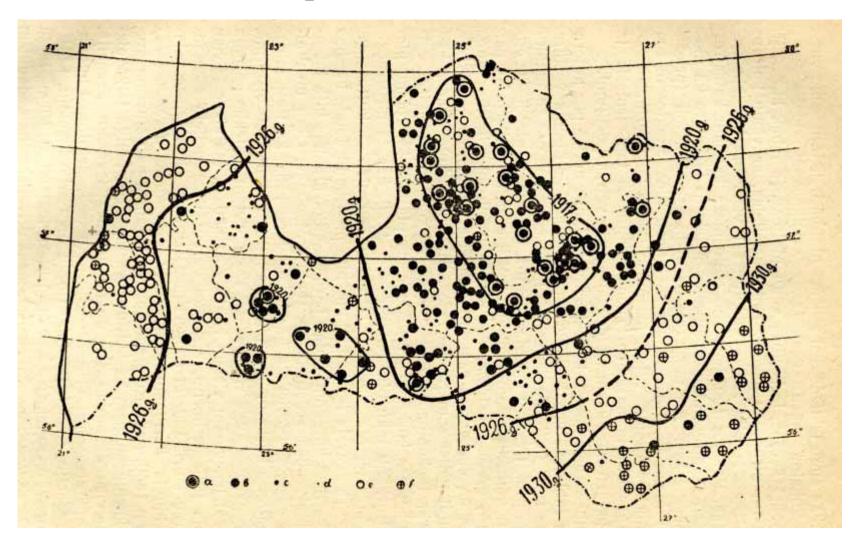
# Psyllid research after G. Flor

New research of psyllids are started again by **Edgars Ozols** (beginning of 20th century)

with studies of distribution and ecology of important carrot pest – *Trioza apicalis* 

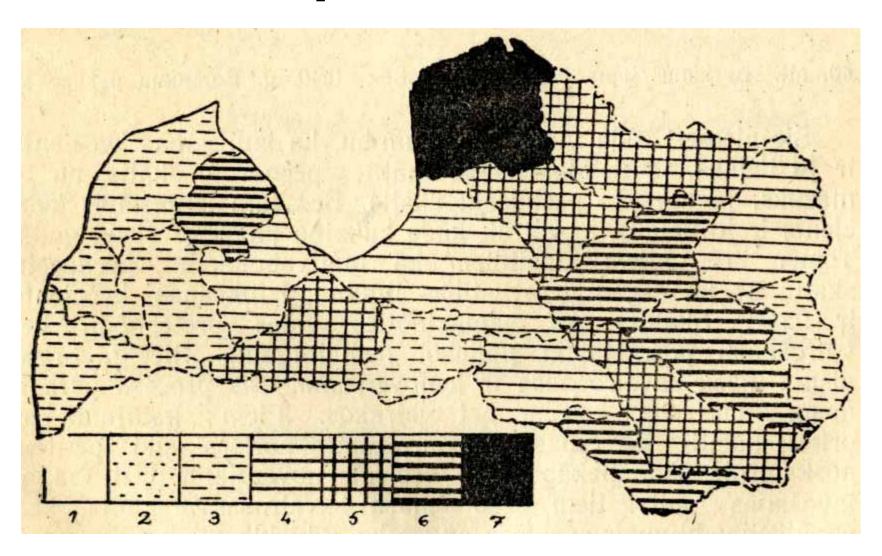


### Trioza apicalis studies





### Trioza apicalis studies



20th century



### Other psyllids

are studied fragmentary (cacopsylla mali, Trioza dispar) and mainly mentioned in lists of pests of fruit (mainly cacopsylla mali) and ornamental trees

# Psyllids on fruit plants in Latvia (review)



Plants with economical importance

apples pears

Non-traditional fruit plants

hawthorns rowans



### Apples (Malus)



Cacopsylla mali (Schmidberger, 1836)

commune species

Cacopsylla picta (Foerster, 1848)

**Pest situation:** Mainly old gardens and on old trees, with no or very low economical importance



## Pears (Pyrus)

Cacopsylla pyri (Linnaeus, 1761) commune species, locally

Cacopsylla pyricola (Foerster, 1848) rare species

Cacopsylla pyrisuga (Foerster, 1848) commune species, locally

Pest situation: Locally with high economical importance (Cacopsylla pyri and Cacopsylla pyrisuga)



# Pears (Pyrus)





# Pears (Pyrus)



European hornet (Vespa crabro) visiting psyllid collony on pear,



# Hawthorns (Crataegus)

Cacopsylla crataegi (Schrank, 1801)

commune species

**Pest situation:** Locally very **important pest** 



## Rowans (Sorbus)

Cacopsylla sorbi (Linnaeus, 1758)

Pest situation: Mainly without importance

### Some news





Cacopsylla sp. on common sea-buckthorn (Hippophae rhamnoides)
Pest situation: Locally with high economical importance

### Some news



### **Psyllids on vines**

!?

Cacopsylla sp. on Vitis cf. vinifera

observed feeding behaviour



# Thanks for your attention!