

WG2 - 'Epidemiological investigation on Bois noir disease in Central and Southern Italy'

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Vineyards (3-15 years old): 94

Varieties: 106

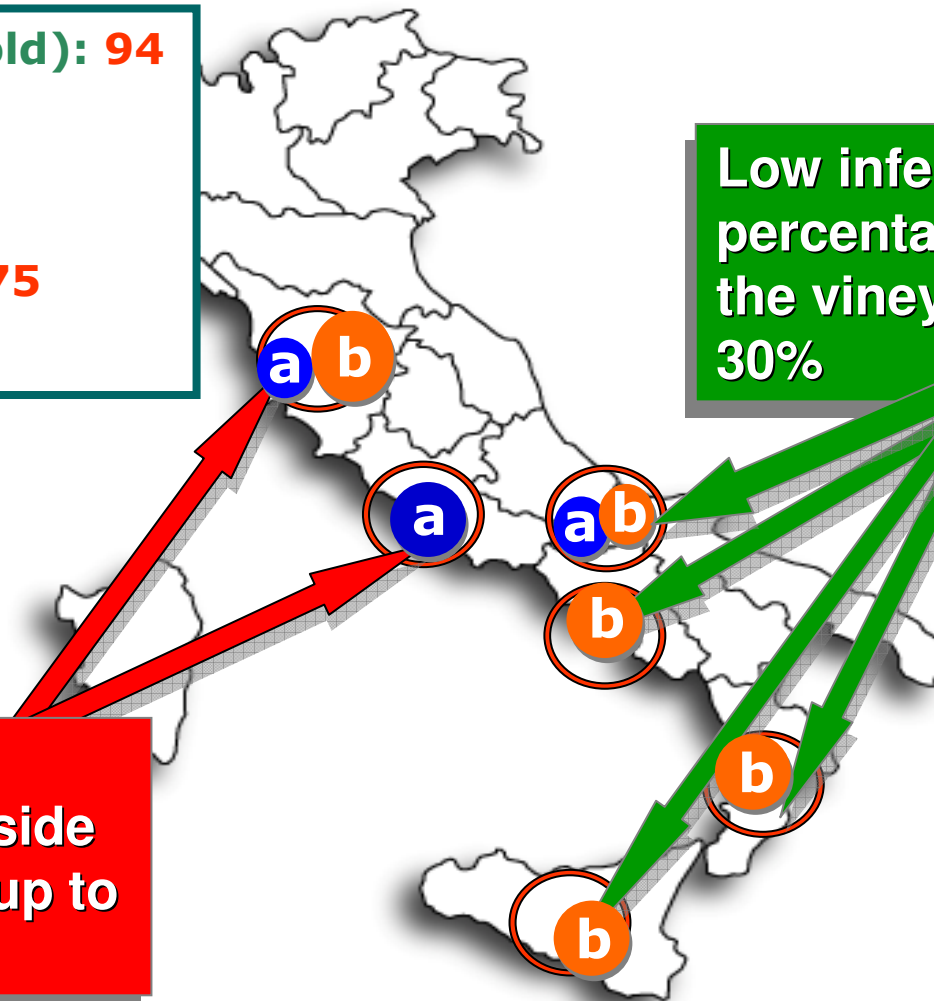
Grapevine plants: 8450

Wild species plants: 3875

Insect specimens: 2782

**Low infection
percentages inside
the vineyards: max
30%**

**High infection
percentages inside
the vineyards: up to
60%**



In epidemic areas..

...open questions...

**very low *H. obscurus* population density in
vineyards with high infection percentages**

**no type specificity in the cycle:
grapevine-*H. obscurus*-wild species**

**ascertained low transmission percentage of BN
by grafting**

New model: nursery

A photograph of a large-scale nursery for young grapevines. The plants are arranged in neat, parallel rows across a field. In the background, there are several red-roofed buildings and a clear blue sky. The foreground shows individual plants in more detail, with black plastic mulch visible around their bases.

**Could the nursery play a role
with early BN infections?**



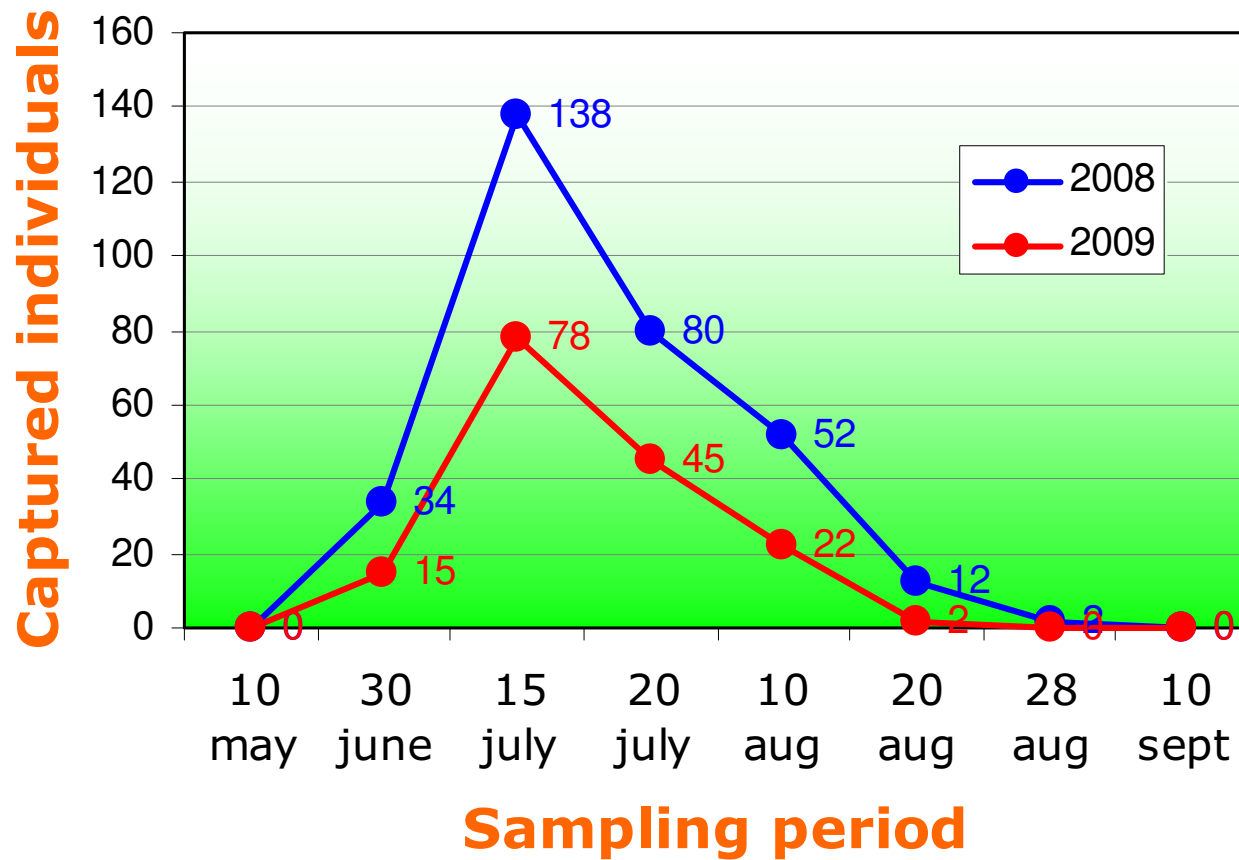
insect

wild species

**symptoms on
grapevine**



H. obsoletus individuals collecting by sweep net



Wild species collected in 2009	Total of collected plants	Number of Stolbur positive	Infection %
<i>Urtica dioica</i>	29	6	20.7
<i>Amaranthus retroflexus</i>	28	0	0
<i>Callistegia sepium</i>	25	5	20
<i>Chenopodium album</i>	23	0	0
<i>Convolvulus arvensis</i>	23	2	8.7
<i>Portulaca spp.</i>	10	0	0
Insect species	Total of captured individuals	Number of Stolbur positive	Infection %
<i>Hyalesthes obsoletus</i> 2008	316	74	23.4
<i>Hyalesthes obsoletus</i> 2009	162	47	29



Varieties collected in 2009	Total of symptomatic plants	Number of Stolbur positive	Infection percentages
<i>Prosecco</i>	5	0	0
<i>Bombino</i>	3	0	0
<i>Pinot noir</i>	2	0	0



grapevine plantlets
are growing under
controlled conditions



Molecular characterization
of infected wild plants and
insect specimens

Monitoring in
2010



Symptoms observations and
molecular analysis on
grapevine plants maintained
in screenhouse

(Maixner *et al.*, 2006)

