The longhorn beetle (*Cerambyx cerdo* L.), vulnerable or pest?

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**INTRODUCTION**

- Is a saproxylic species associated with dead wood and old trees with bad physiological state[2]
- Is considered secondary pest [4]
- Distribution: (Figure 1 and 2)

**OBJECTIVE**

Analyze the situation of *Cerambyx cerdo* in different countries of Europe because on determinate areas this species are decreasing (North Europe); while in other areas, like the Mediterranean Region, are in high population density. Here we studied this situation and try to give a control method in those areas of Southern Europe. In addition, a forestry technical card is created to distribute to sector experts.

**RESISTANCE MECHANISMS BY THE TREE**

- Primary disease/pest
  - ↓ turgidity → wilting → ↓ defensive capacity → ↑ susceptibility to *C. cerdo*[3]
- Secondary disease/pest
  - Compartmentalization of host tissues
  - Lignification of cell walls
  - Internal impervious tissue
  - Necrophylactic periderm
  - Callus formation in the cambial zone if the injury is quite deep[3]

**BIological CYCLE**

- In 15 days the adults have to mate
- Adults stay in the tree until there are favorable conditions
- 3-5 years to complete the cycle
- The eggs hatch out in 10 days
- Larvae feed on the xylem

**DAMAGE**

A. Sawdust accumulation in trunk base
B. Dry branches and fallen leaves
C. Reddish
D. Elliptic exit holes (20mm)

**LIKE A PEST?**

South Europe → Control Strategies

**LIKE VULNERABLE?**

North Europe → Conservation Strategies

**EXPERIMENTAL**

- Change the protected state for *Cerambyx cerdo* → serious problem in Mallorca
- Determine the specific volatile organic compounds that attract the insect

**Conclusion**

- In South Europe → Pest → Silviculture
- In North Europe → Vulnerable → measures to promote the development of the species
- Alteration of biotic and abiotic factor will affect *C. cerdo*

**BIBLIOGRAPHY**