

**Phytosanitary concerns in the biomass poplar plantation of the COFEA Project
(Monterotondo – Rome)**

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A six-year monitoring survey (2005-2010) was carried out in a biomass poplar plantation established with three *Populus xcanadensis* clones in the spring 2005 in Monterotondo (Rome) (Cofea Project) with the goal of assessing the phytosanitary damage caused by pests and diseases.

Survival rate was fairly good, being negatively affected only in restricted areas due to stagnant water. Huge attacks of *Monoistaira unicostata* on leaves, felt down early in the season, were recorded during 2006-2008, which worsened the effects of summer droughts. No fungal attacks were detected, probably because of the hot and dry climate in the area, but the physiological disease of "black spots" appeared in the third year of cultivation, due to strong plant competition as well as summer drought.

The most serious problem arose for the 'poplar and willow borer' (*Cryptorhynchus lapathi*), which rapidly spread inside the plantation coming from external infestation sources. Attack intensity progressively increased during years, causing severe stem breakage starting from 2009. Three insecticide sprayings were annually carried out in a few plots during 2006-2008; they consistently limited pest populations and significantly reduced damage (1-2% of broken stems in the treated plots versus 10-30% in the control plots). By the way, chemical sprayings in SRF plantations must be given careful consideration from an economical as well as environmental point of view.