

FRANCO CIONI¹, GIANFRANCO MAINES¹, FRIEDRICH KEMPL²

¹BETA, Via Conca 75, IT – 44123 Ferrara,

²Zuckerforschung Tulln GmbH, Joseph-Reither-Straße 21-23, A – 3430 Tulln

NEW STRATEGIES IN CLS CONTROL IN ITALY AND AUSTRIA

**Stratégies nouvelles en Italie et Autriche pour le contrôle de Cercospora /
Neue Strategien der Cercospora-Kontrolle in Italien und Österreich**

ABSTRACT

CLS is the sugar beet foliar fungal disease which causes the most economic damage in Italy. In Northern Italy, this parasite may affect, in a year of medium CLS pressure and considering the adoption of ineffective control strategies, up to 10% of the Gross Income for values about 12 - 15 million euro every year.

Field surveys, validated by laboratory tests, showed the occurrence of resistant strains of *Cercospora beticola* to fungicides commonly used in last decade for controlling the cryptogam (belonging to the families of strobilurin (QoI inhibitors) and triazoles (particularly difenoconazole). This imposes the use of alternative products, with different mechanism of action, for the disease containment.

On the other hand, the predictive model used by Beta for decide the times of the treatments against cryptogam, has been further upgraded. This model, based on measurements of relative humidity and temperature obtained in real time from a network of weather stations, provides indications that enable the sugar beet grower to identify the ideal time to spray the fungicides, thus abandoning the old criterion based on a calendar strategy according to the areas.

This paper reports the results of field trials carried out in the years 2012 - 2013, the monitoring carried out in the laboratory to confirm the loss of efficacy of strobilurin and triazole due to the phenomenon of occurrence of resistant strains, as well as new indications for containment of the damages caused by CLS in Northern Italy and in Austria.
