



## SSC provided by SBI successfully supports an insecticide registration

In February 2013, Karate Zeon 050 CS, a plant protection product produced by Syngenta Crop Protection AG, was re-registered in Poland on the basis of a Site Similarity Certificate (SSC) provided by Spatial Business Integration, Germany.

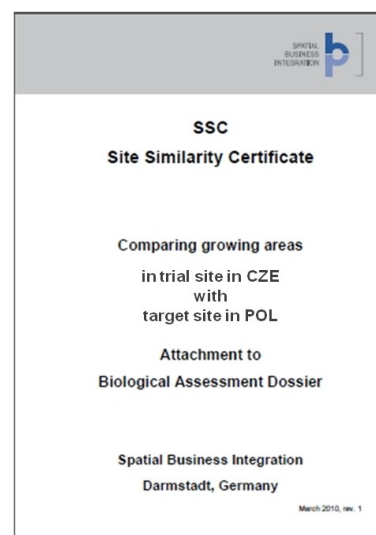
KARATE ZEON® is a synthetic insecticide which is highly effective on most damaging chewing and sucking insects at all stages of development, even under difficult weather conditions. It can be applied on a wide range of crops, such as cotton, maize, cereals and vegetables. First launched in 1985, the product is today registered in over 100 countries worldwide for more than 140 crops.

KARATE ZEON® 050 CS had already been registered in Poland until January 2011. In March 2010, documents were submitted to the Polish Ministry of Agriculture and Rural Development for re-registration. They were compiled according to the *OECD Guidance for Industry Data Submissions on Plant Protection Products and their Active Substance, Revision 1, March 2001*.

The Biological Assessment Dossier was based on trials conducted in Poland and the Czech Republic. However, for providing a thorough basis of efficacy trial data for Poland, a Site Similarity Certificate was attached. The SSC proved the similarity between a Czech and a Polish site and so successfully assessed the transferability of the Czech trial results to Poland.

The Polish Registration Authority accepted the conclusions on site similarity drawn in the SSC by Spatial Business Integration and KARATE ZEON® 050 CS was successfully re-registered in February 2013.

Over the last years, Syngenta Crop Protection AG has been a constant customer for SSCs. Several European subsidiaries ordered SSCs for coping with the situation of providing appropriate data and data analyses to the registration authorities. They recognized the benefits of the technology which enables the comparison of trial sites on the basis of satellite image information linked with other parameters. By processing and analyzing satellite image series, Spatial Business Integration compares





the dynamic and intensity of biomass growth of crops between two growing regions, together with other relevant key factors required by the registration authorities.

If the site characteristics are similar, Spatial Business Integration elaborates a SCC. Trials conducted in the one region would lead to similar results in the other region. That implies that the trial results are transferable from the one region to the other.



Mr. Marian Myslicki, Regulatory Manager Insecticides & Seed Care at Syngenta Polska Sp. z o.o (photo, left) explains: “The SSC provided us with a solid source of data and scientific-based analyses which extended and secured our own results. It made our work easier and increased the acceptance of our BAD at the Registration Authority.”

“Thanks to the SSC, we not only saved additional trials and secured our BAD, but also were able to submit it earlier”, Mr. Myslicki concludes.

Today, SBI not only successfully applies satellite image technology for site similarity analyses, but also supports many plant protection products companies already in the early planning stages of their field trial programs. SBI assesses the optimal locations for trials by providing pest pressure maps, analyzing the site-specific crop biomass growth derived from satellite images, computing the weather conditions favoring the pest development and spatially analyzing the risks of the pest outbreaks in each country of interest. Thus, within the framework of zonal registration projects, fewer trials become necessary, since the selected sites offer a greater probability that the trials succeed. Thanks to this technology, registration authorities are able to verify that trials were conducted in those sites which cover the full range of conditions in terms of, e.g., crop growth habit, weather, soil and other parameters. This confirms to registration authorities that all relevant conditions were encountered in the trials as the site selection is scientifically traceable and documented by SBI. Once the trials are planted on the field SBI uses satellite remote sensing for monitoring and assessing crop characteristics and yield expectation.