



"WatchITgrow", monitoring potatoes from space

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In collaboration with the Belgian potato trade and processing industry association (Belgapom) Belgian researchers (VITO, CRA-W, ULg) have developed a web application for potato monitoring.

The application, called "WatchITgrow", provides information on the growth and development of the potato crop as observed from satellite images. By monitoring temperature and rainfall and comparing actual with average values, the production risk or quality losses can be assessed. Crop growth models are used to generate yield forecasts, currently for the three main potato varieties grown in Belgium (Bintje, Fontane, Nicola). WatchITgrow can also be used to store and exchange field data. This includes basic information such as the variety, planting date, date of haulm killing, harvest date or more specific information on treatments such as application of fertilizers, pesticides, irrigation,...

The web application is available free of charge for the entire Belgian potato sector, from farmers to traders, processing companies, suppliers, consultants, researchers,... It allows them to better monitor the potato production in Belgium. This should lead to an increase of the production in a sustainable way, which is necessary to support the further growth of the sector.

During the 2017 season more than 300 users registered on WatchITgrow. More than 7500 hectares of potatoes were monitored with WatchITgrow, corresponding to approximately 10% of the total Belgian production area.

Expansion and scalability of the platform is demonstrated through linking it with the FS-TEP (food security thematic exploitation platform.