

field management and vegetation control system

Cropio is a satellite field management system that facilitates remote monitoring of agricultural land and enables its users to efficiently plan and carry out agricultural operations.

Cropio provides real-time updates on current field and crop conditions, determines vegetation levels and pinpoints problem areas, delivers precise weather forecasts and an actual overview of the soft commodity market.

Electronic Field Catalog

Field groups						+ Cruite res Pater	+ Craste new Fact	-
Central cluster								,
Alama .	Parts, 100	Mapped area, ha	Legelates, No.	TRADE AND A				
Central: Farm 1	10	203.45	303.67	194.10	Manage access rules		11	6
Certral: Farm 2	4	176.20	178.20	178.20	Manage access tutes		11	1
Summary		279.45	279.47	370.36	1			
ast cluster								,
Netw	Parts And	Mapped area, Inc.	Legelares, ha	Table area, ha				
East: Farm 1	10	1 017.00	1 443.00	1 017.00	Warage access rules		11	0
East: Fam 2	12	217.06	.717.06	217.06	Manage access rules		11	1
East: Fam 3	12	860.53	860.53	860.53	Manage access rules		11	6
Burning		2 004.50	3 020.08	2 894.00				

Cropio is able to display the geographical and hierarchical structure of any size of agricultural company in the form of an electronic catalog.

The electronic field catalog allows it's user to control the actual cultivated area of each production season. Using the catalog navigator user can quickly move between farming units.

Electronic field maps are available for download in most common formats (e.g. ESRI shapefile, Google KML). The user is able to download the Shapefile of an individual field or farm as well as a comprehensive map of the entire farming cluster.

The map editor will allow you to edit shapefiles and manually add new fields directly to your Cropio online account.

Imagery





Cropio automatically refreshes satellite images for each field on a regular basis using the most up-to-date image processing technology.

High resolution images (15*15 meters per pixel) are available in natural colors, as well as in the form of vegetation maps; this allows the user to control the condition of crops in each field zone and identify abnormalities.

15*15 resolution is sufficient for identifying five meter-wide zones of problem areas on the field and for use of VRA with seven+ meter grid size equipment (e.g. seeders, sprayers, etc.).

Weather data



Cropio provides accurate meteorological data important for field management and productivity analysis.

Meteorological data provides the air and soil temperature, precipitation, soil moisture content and weather forecast.

The System automatically identifies the most reliable source of data for each specific field in respect to its individual location.

Private weather stations are easily integrated into the Cropio system through its web service interface and API settings.

Meteorological data is refreshed on a daily basis and provides a historical archive for past five years.

Recording system



Technological field card allows the user to record details about each specific activity carried out during the season.

The field record card contains soil analysis results, tillage technology details, seeding rates and dates, history of crop protection elements and fertilizers applied - as well as crop characteristics in specified growth stages.

The field recording system makes it possible to document and control effectiveness of specific field operations.

Via the field record card, Cropio can be integrated with supplementary programs in order to set up real time data exchange.

Yield Forecast



Yield forecasting function is available in Cropio provided that your account has been updated with basic historical crop rotation data.

Together with ten year historical data on vegetation and weather, collected in Cropio's database, the System provides a reliable tool for predicting crop yields.

Field Zoning & Vegetation Control



Farm Management System

FarmWorks, AgrarOffice, JohnDeer APEX, etc.



Field zoning function makes it possible to review homogenous fields and any uneven vegetation cover within the specified area. While zoning, Cropio composes a vegetation map, which can be used for VRA and other precise farming techniques.

Cropio provides a recommendation of Nfertilizers for cereals and helps to control the nitrogen deficit for each specific zone on the field.

The N recommendation rate, as well as application map, can be changed manually while setting up a task. Completed task application is saved in standard ISOBUS format and can be performed on the field with modern agricultural equipment.

Notification System



The Cropio system notifies it's users on the condition of crops and informs of forecasted precipitation. As soon as any abnormal development of vegetation index is detected the system automatically sends an electronic message to its user.

Notifications are sent via e-mail or sms if signed up with mobile number. Moreover, in the beginning of the week, the System composes a comprehensive report regarding the condition of crops and sends it to the subscriber's email.

Map Directory





Cropio's map directly allows it's user to compose and print out different maps: relief maps, vegetation maps, and crop maps.

Topographic maps use precise relief information with an accuracy of within one meter of elevation, based on the NASA special mission.

Vegetation maps are formed on the basis of high resolution images. After introducing an individual color palette, it is possible to compose crop maps with Cropio.

Additional settings provide individualized options for map printing: special filtering by crop, field name, area, and format options.

Integrations



Камылино

Т

Station 2661

Air temperature: +11.7 C°. Relative humidity: 73.3 %. Precipitations by day: 0.0 mm.

Data updated at 08 Oct 20:00 (Moscow)

Station 2662

Air temperature: +12.2 C*. Relative humidity: 70.1 %. Precipitations by day: 0.0 mm.

Data updated at 08 Oct 17:00 (Moscow).

All functions of Cropio, including adding and editing of fields, import and export of vegetation and meteorological data, are available through Cropio HTTP API. This makes it easy to integrate third-party software systems to work with Cropio.

Cropio can be connected to the wide network of private weather stations in order to automatically obtain accurate weather information and forecast.

USA & Canada

USA, New York info@us.cropio.com +1 516 730 7382

EMEA

Great Britain, London info@uk.cropio.com +44 20 3642 8344

Russia

Russia, Moscow info@ru.cropio.com +7 499 918-41-50

CIS

Ukraine, Kyiv info@ua.cropio.com +380 44 254-63-11

