



Agrisoft Systems NEWSLETTER

Forty-seventh edition, Oct.— Dec. 2023

Message from the Management

A look back at 2023 and outlook for the coming year

Dear Customers and Friends,

on behalf of the entire Agrisoft Systems team, I would like to wish you all the best for the new year. As usual in our new year's edition of the newsletter, we take a look back at the most important things that happened at Agrisoft Systems in the past year and discuss some of our ideas and plans for 2024.

The last year saw another significant step forward for the OMP Plantation suite with the release of version 10.3 in July. The biggest changes in this upgrade focused on the OMP-BBC black bunch count crop forecast module and the pesticide data module within OMP. Whereas pesticides were previously handled in a separate add-in program called OMP-PM, from now on pesticide recording is completely integrated into the main OMP-DBMS application alongside fertilizer recording. As part of this migration, all data analysis forms and reports related to pesticides were redesigned to fit into the general OMP layout. In many cases we also added extra grouping and display options to allow for more analysis options than in the old add-in. The underlying record sources and queries were also completely rewritten and streamlined to massively improve speed and performance. In OMP Plantation 10.3, we differentiate between “regular” pesticide application and corrective pesticide application for the control of pest outbreaks. Regular application refers to anything which is applied according to a pre-planned schedule. Of course, most regular pesticide application is done in the context of chemical weeding using herbicides, but it could also include a preventive application of pesticides to prevent pest or disease outbreaks. All

the pesticide data analysis forms and reports in OMP Plantation 10.3 have the option to restrict to either the regular or the pest and disease control application.

The other part of the OMP Plantation suite with major changes in version 10.3 is the OMP-BBC add-in for black bunch count crop forecasting. The data entry for the monthly crop distribution now uses a rule-based system, which means that you can define as many different sets of monthly distributions as you desire with your own rules as to when a certain distribution should be applied. A calculation wizard makes it easy to grab distributions from the historical actual production data restricted using custom filter criteria. Furthermore, it is now possible to manually enter or edit every block's forecast bunch weight for every month, if desired. may be useful to be able to edit the values of individual blocks, for example if you know there are mistakes in the historical data for that block or if there were unexpected occurrences like atypical weather or a pest outbreak. With these changes, the BBC forecasting module provides even more flexibility and a very good balance between keeping the general data entry load minimal while still making it easy to handle specific exceptions where needed.



Of course, the OMP Plantation 10.3 release also included a large number of other improvements to various data analysis forms, reports and other



Agrisoft Systems NEWSLETTER

Oct.— Dec. 2023

Message from the Management

program modules. One noteworthy improvement is the revamped setup and installation logic, which was specifically designed to make installing and updating OMP as easy as possible for system administrators in large groups who are running OMP on a central server accessed by client users via remote desktop.

In the second half of the year, we have continued working on various different topics. The biggest overall topic is the planned new field work and resource use module. This module has been previewed in previous editions of this newsletter. Roughly speaking, it will allow users to define a list of jobs and resource types, as well as the expected resources usage rates for each job for labor, fuel, materials and equipment. These usage rates can be entered on per hectare, per palm, per t or per block basis. The resource use calculation will cover multiple different types of jobs including harvesting jobs, fertilizer and pesticide application as well as general field work jobs such as pruning or circle weeding. As such, this is quite a complex module which needs to draw together information from various other OMP modules including the crop budget, fertilizer and pesticide modules to generate the resource use budget. Actual work carried out can be recorded by block, date and job code for general field work jobs. The system works out the resource use budget by block, month and job code based on the field work schedule, crop budget and the fertilizer and pesticide recommendations. The entry module is flexible and will allow actual resources used to be entered at different spatial and job grouping levels (not only by single block and job code). For example, the actual diesel used will often only be readily available by division and month, and the assignment to how much diesel was used specifically for which job and/or block can be difficult. The main purpose

of this module is to simplify planning for resource requirements for the coming year, and then monitor actual resource usage vs the budget as the year progresses.

Another important improvement that we are working on is an automatic trigger-based system to synchronize daily and monthly production tables in OMP. This is not a trivial matter because different OMP users are used to entering production data at two different time levels and in particular older historical data is often only available in monthly form. On the other hand it is becoming more and more standard that the daily production data is inserted into the OMP tables automatically from ERP or weighbridge databases outside of OMP. At the moment, any new data inserted in this way will not automatically reflect in the monthly production shown in main OMP, and users have to manually run the process to recalculate the monthly production from the new daily data for the months they wish to cover. This is rather tedious and prone to mistakes,





Agrisoft Systems NEWSLETTER

Oct.— Dec. 2023

Message from the Management

so having a system that automatically guarantees consistency between the two time levels will be a big step forward.

A third group within our development team has been working on a new way of transferring data between our OMP Field Survey computer program and the associated Android app deployed on mobile devices. At the moment, survey definitions and results have to be transferred or sent via email using text files that then have to be loaded manually by the recipient. This can be tedious in particular for the OMP operator receiving data from multiple surveyors, and furthermore transferring data can be slow if the definitions include large amounts of data such as a large number of predefined palm point records. To avoid these limitations, we are working on implementing a web service / REST API to run alongside the database. App users will be able to request and load definitions from this API, as well as to post new results that have been collected. To be able to use this API system, users will have to have their OMP database on a server with a publically reachable IP address (or use a dynamic DNS solution).

For the upcoming year, our first aim will be to finish the next OMP Plantation release, which will contain amongst other improvements the changes mentioned above that we have been working on in the second half of the year. Once

this is done, the next big project is already under planning and will focus on a tool for maximizing oil extraction rates by monitoring mill losses and fruit oil contents. We are already excited for this project, which will close the existing gap in the OMP portfolio related to milling and will significantly increase the power of OMP as a tool for oil yield improvement. As usual, a selection of some of the things in the to-do pipeline can be found in the section “From the developer’s desk” at the end of this newsletter.

Another thing we are looking forward to is the workshop on yield intensification that will be held by TCCL in Wye from 27 May to 01 June 2024. The workshop will review a variety of aspects related to field management, crop nutrition, mill residue management, and pest and disease management that contribute to maximising oil yield. The aim is to bring together presenters and participants from many companies in more than 10 producer countries. We are absolutely looking forward to the chance to meet many of our OMP customers and to a very interesting workshop. Anyone interested in participating is invited to contact TCCL for further information and to enquire whether there are still any free slots.

Yours sincerely,

Max Kerstan





Agrisoft Systems NEWSLETTER

Oct.— Dec. 2023

From the developers desk

A selection of the on-going developments and plans which are part of our constant efforts to continue to improve Agrisoft products.

Field work and resource use module

- Budgeting for regular field work tasks like weeding, pruning, fertilizer application etc.
- Flexible definition of jobs with expected rates of usage of resources like fuel, equipment, material and labor
- Scheduling wizard to generate field work budget based on desired number of rounds and total area to cover in one cycle
- Recording of actual areas covered by job, block and date and comparison vs budget
- Recording of actual resource use and comparison vs budget
- Integration of fertilizer and pesticide application data
- Assignment of blocks with similar characteristics to “field work groups” which have similar field work plans

General improvements

- Additional grouping options on fertilizer reports and data analysis forms
- Actual vs recommendation reports for nutrients
- New 3 year nutrient application report
- Totals lines for vegetative growth form and report
- Option of including background soil type maps in OMP-GIS
- Rainfall charts over whole estate
- Automatic synchronization/recalc of daily and monthly production tables
- APIs to facilitate synchronizing OMP data with other systems such as ERP solutions
- Recording of relative humidity data

FS data transfer

- API web service to run alongside database on server
- App clients will be able to request a definitions update and only need to load any new or changed definitions
- Avoid having to re-download all data if connection was lost during previous transfer
- Upload survey results via API
- No requirement to send data via email and manually import results into OMP database
- Requires public IP address on the server