Agrisoft Systems
NEWSLETTER
Fifty-fourth edition, Jul.— Sep. 2025

## Message from the Management

# News from Agrisoft Systems

Dear Customers and Friends,

The past three months have been a busy time for the Agrisoft Systems team. Our main focus has been the completion and release of OMP Plantation version 10.5. This release brings a number of long-awaited improvements, including automatic synchronization between daily and monthly production data, a new backend API for system integration, and several powerful new reporting features to support more effective plantation management. The changes and improvements included in this new version are reviewed in more detail in the feature article section of this newsletter.

With this milestone behind us, development has already begun on our next major project: the new OMP Mill application. This upcoming module will focus on monitoring mill losses, bunch oil content, bunch grading and all factors influencing the oil extraction rate (OER). The goal is to provide a comprehensive and data-driven view of mill performance, enabling users to identify inefficiencies and improve overall oil recovery. The OMP Mill project will be our main development focus over the coming months.

We are also continuing to explore how AI technology can help both us and our customers. On one side, we are integrating AI tools to speed up software development and testing internally. On the other, we are investigating practical AI applications for plantations — such as automatic palm point identification from drone imagery, and AI-based yield projection models that can use historical and spatial data to predict production trends more accurately.

A third topic we have been working on is a web API option for transferring OMP Field Survey data between mobile devices and the central OMP database. The API will support both the transfer of updated survey definitions from the central database to the mobile devices, as well as the transfer of survey data collected in the field going the other way. This API option will run on the customer's own server hosting the OMP database, retaining complete control of your data within your own network and server environment.

As always, customer support remains a key part of our daily work. We continue to assist customers in order to help them get the best out of their OMP installations. In particular, we often help customers in extracting and analyzing their data in the exact formats they need, often using custom SQL queries within the OMP Query Writer (QW) add-in. These are frequently used to feed business intelligence (BI) dashboards that combine OMP data with information from ERP or other management systems — a trend we are seeing increase steadily across estates.

Once again, we would like to thank all our customers and partners for their continued collaboration and feedback. It is your input and ideas that help us make OMP better with every release.

Warm regards,

Max Kerstan

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**Feature**

# OMP Plantation 10.5 Released

We are pleased to announce the release of our new version of OMP Plantation, carrying version number 10.5. As always, customers with active maintenance and upgrade agreements (MUAs) receive this version at no additional cost.

This latest release delivers significant improvements both behind the scenes and for regular data analysis users. Automatic synchronization between daily and monthly production data ensures consistency, while the new backend API opens the door for seamless integration with other enterprise systems. At the same time, agronomists and managers will benefit from a large number of new reporting features such as progress tracking of fertilizer and pesticide applications, a redesigned nutrient balance report, and yield projections at block level.

**Automatic synchronization between daily and monthly data**

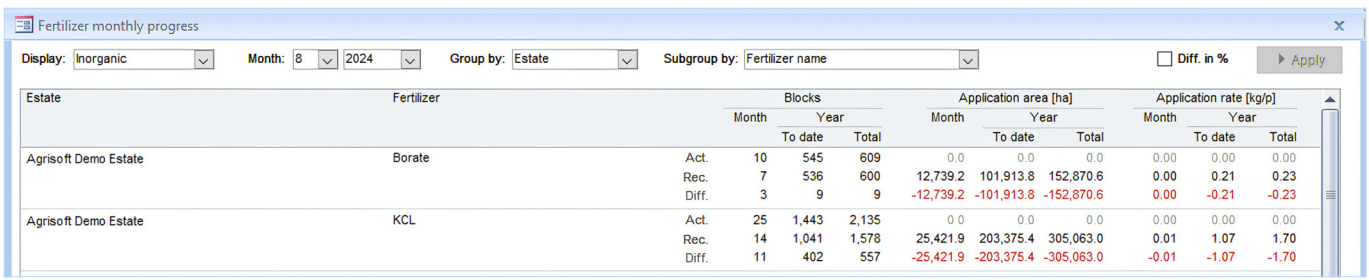
In earlier versions, the process to update and recalculate monthly production data had to be manually initiated whenever daily harvesting records changed. This was time-consuming and sometimes led to inconsistencies between monthly and daily data if the operator forgot to carry out the monthly data update. Version 10.5 eliminates this problem by automatically synchronizing the daily harvest data from HRR with the monthly figures in DBMS.

Not only are core values like bunches and tons recalculated, but also indicators such as harvest rounds and round length. For estates importing daily harvest or weighbridge data from external systems, this improvement ensures that both daily and monthly numbers are always in sync. Note that the synchronization works both ways, and manually editing or importing monthly data will now also adjust the daily OMP HRR data to avoid inconsistencies. This means the system is flexible enough to allow either daily or monthly production data entry, even within the same plantation.

**Backend API for system integration**

Many plantations rely on ERP or operational databases in addition to OMP. Until now, bringing that external data into OMP required sometimes -complicated workarounds. The new backend API simplifies and standardizes this, making it much easier for IT teams to set up an automatic data transfer system.

Through a safe staging area, changes in external data can be reproduced in the OMP tables, by keeping records of data that was inserted, updat-




| Estate | Fertilizer | | Blocks Month | Blocks Year To date | Blocks Year Total | Application area [ha] Month | Application area [ha] Year To date | Application area [ha] Year Total | Application rate [kg/p] Month | Application rate [kg/p] Year To date | Application rate [kg/p] Year Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Agrisoft Demo Estate | Borate | Act. | 10 | 545 | 609 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| | | Rec. | 7 | 536 | 600 | 12,739.2 | 101,913.8 | 152,870.6 | 0.00 | 0.21 | 0.23 |
| | | Diff. | 3 | 9 | 9 | -12,739.2 | -101,913.8 | -152,870.6 | 0.00 | -0.21 | -0.23 |
| Agrisoft Demo Estate | KCL | Act. | 25 | 1,443 | 2,135 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| | | Rec. | 14 | 1,041 | 1,578 | 25,421.9 | 203,375.4 | 305,063.0 | 0.01 | 1.07 | 1.70 |
| | | Diff. | 11 | 402 | 557 | -25,421.9 | -203,375.4 | -305,063.0 | -0.01 | -1.07 | -1.70 |

**Figure 1: Fertilizer monthly progress form.**

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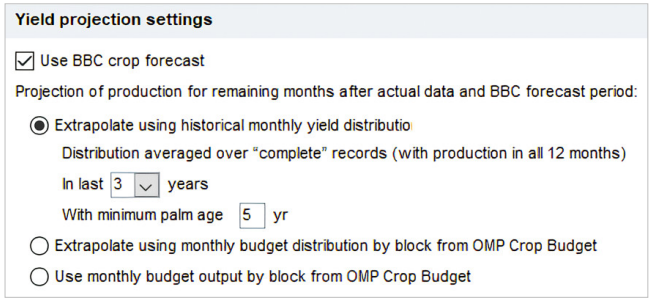


**Figure 2: Settings for calculation of yield projection.**

ed, or deleted in a standardized format. IT teams can set up automated transfers—for example, importing daily weighbridge data or recording fertilizer actuals—and have OMP process them reliably. The API also allows selective exclusion of fields, making it adaptable to each company's needs. For example, you could choose to exclude the number of harvester man-days from the daily production API if your weighbridge system does not contain this data.

**Stronger reporting and data analysis tools**

A major focus of version 10.5 is to strengthen the reporting tools used by field managers and agronomists.

**Tracking area done vs. area scheduled**

New monthly progress forms for fertilizers and pesticides (figure 1) go beyond application rates to show exactly how much area and how many blocks have been covered compared to the plan. Data is available by month, year-to-date, and an-

OMP Report – Nutrient balance

DEMO

No filter active.

**Report Time range: 2019 – 2024** **Agrisoft Demo Estate**

Nutrient balance 2019 – 2024

| | | Nutrient application and usage [kg/ha/yr] | | | | |
|---|---|---|---|---|---|---|
| | | N | P | K | Mg | Ca |
| Application | Inorganics | 73.1 | 23.8 | 133.3 | 6.4 | 46.0 |
| | Organics | 9.6 | 1.3 | 28.3 | 2.2 | 2.1 |
| | **Sum** | **82.8** | **25.1** | **161.6** | **8.5** | **48.1** |
| Usage | Immobilized | 49.5 | 26.8 | 93.7 | 9.4 | 12.0 |
| | Removed (FFB) | 109.1 | 9.7 | 126.4 | 20.9 | 19.2 |
| | **Sum** | **158.6** | **36.5** | **220.1** | **30.2** | **31.3** |
| Net removal | **Application - Usage** | -75.9 | -11.4 | -58.5 | -21.7 | **16.8** |

Nutrient balance calculation parameters

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Time range: | 2019 – 2024 | | | N | P | K | Mg | Ca |
| Area: | 10,892.20 ha | Nutrient content FFB | kg/t | 4.6 | 0.41 | 5.33 | 0.88 | 0.81 |
| Area in yield: | 9,415.63 ha | Immobilization rate | kg/p/yr | 0.37 | 0.2 | 0.7 | 0.07 | 0.09 |

**Figure 3: Sample of nutrient balance report.**

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## Feature

nually. The application rate shown on this form is calculated only over the actual area relevant for fertilizer application rather than averaged over the whole area of the spatial unit in question. This gives managers a practical, field-based view of how application work is progressing, ensuring that schedules are being met and resources are allocated effectively.

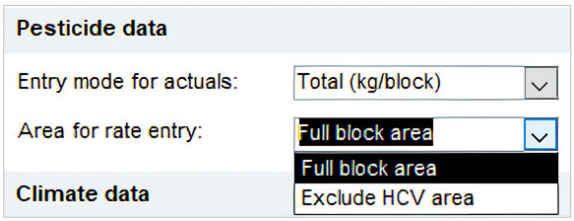


**Figure 4: Pesticide rate entry settings.**

Different calculation methods are available, allowing estates to choose the projection style that fits their planning needs (see figure 2). The new projected yield field is included on the report "Block agronomic summary".

**Redesigned Nutrient Balance report**

The nutrient balance report has been reworked from the ground up (figure 11–13). Users can now choose calculation methods, restrict soil analysis to sampling zones, and view a far more detailed breakdown of nutrient inputs, usage, yield and soil deficiency scores. This redesigned report is clearer, more flexible, and much more informative for long-term nutrient planning and sustainability.

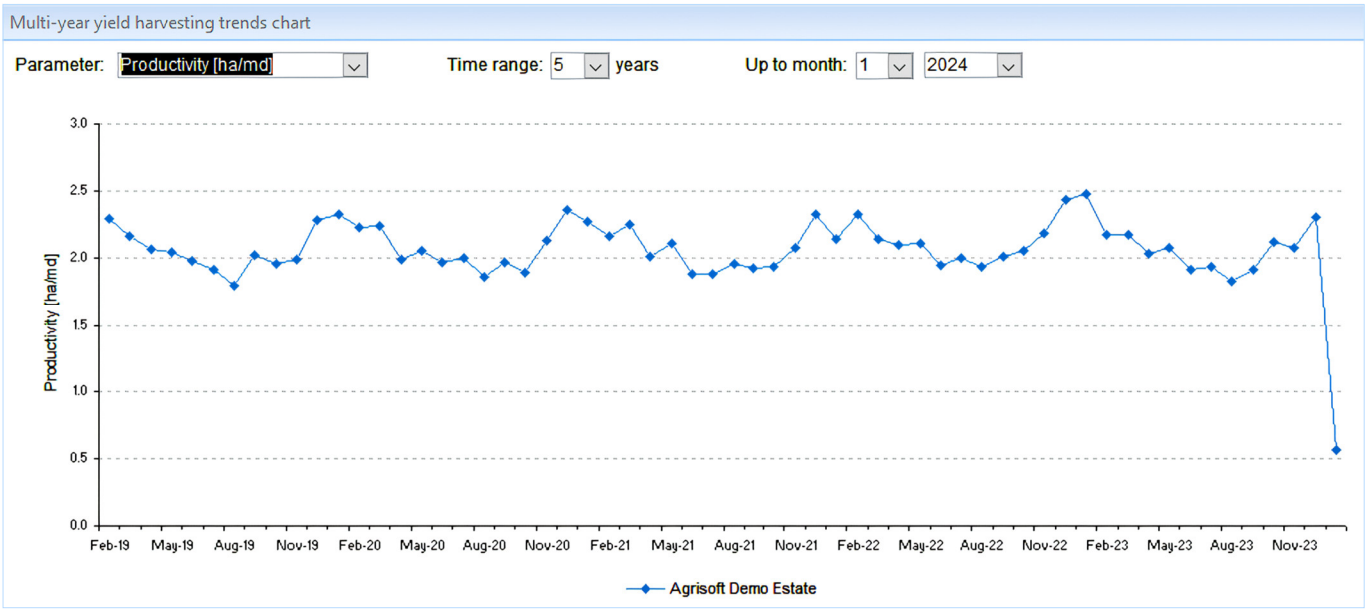


**Figure 5: Multi-year harvesting chart.**

**Yield projection at block level**

Responding to customer requests, OMP now calculates a projected yield to the end of the current year. The projection combines actual yield so far up to the selected month, BBC crop forecast for the next four months, and extrapolations based on historical or budgeted distributions.

**Exclusion of HCV areas for pesticides**

In previous versions, it was already possible to exclude HCV areas from fertilizer calculations. Version 10.5 extends this to pesticides as well. Similarly to fertilizers, users can set the "Area for rate entry" to either "Full block area" or "Exclude HVC area" (Figure 15). This ensures more accu-

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rate planning and compliance with sustainability requirements.

**Multi-year trend chart for harvesting and productivity**

The latest version of OMP introduces a new long-term chart for tracking harvesting and productivity measurements (figure 5). The chart is similar to the previous chart for long-term yield trends but shows parameters such as monthly number of harvest cycles or productivity.

Other general improvements include expanded grouping options (now covering plantation/ estate level across many forms and reports), an updated block details report, the option of manually entering the area Done in pest and disease control tables, and inclusion of water table depth as a new agronomic field available for reporting and GIS maps.

**Add-in enhancements**

Both the FS and HRR Add-ins have received upgrades to make them more powerful and user-friendly:

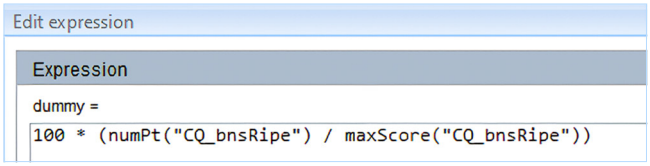


**Figure 6: Sample expression using numPt function.**

- **Field Survey (FS)** – The expression builder now includes a numPt function to reference the number of survey points. Importing results from Excel is easier with a new column-based format option.
- **Harvest Rounds Record (HRR)** – Daily overview reports can now be sorted by the new Harvest Index. Harvesters can also record discarded and unpollinated bunches directly in the system (figure 7), providing more accurate insight into crop losses and pollination performance.

| Bunches | | |
|---|---|---|
| Harvested | Discarded | Unpoll. |
| 1,156 | - | - |
| 260 | - | - |
| 878 | - | - |

**Figure 7: New fields for entering the amount of discarded and unpollinated bunches.**

**Language support for French and Portuguese**

To support our growing user base in francophone Africa and Brazil, OMP Plantation is now available in French and Portuguese. This makes the system more accessible for local field staff and agronomists.

**Conclusion**

OMP Plantation 10.5 combines robust backend improvements with powerful new agronomic tools. Automatic synchronization and the backend API improve data consistency and system integration. Meanwhile, managers and agronomists gain better oversight of field operations through the new progress tracking, yield projections, nutrient balance report, and HCV area handling for pesticides.

Together, these features help ensure that estates have the tools needed to manage data more efficiently, plan more accurately, and make better-informed decisions in the field.

As always, a complete list of changes is included in the official What's New document provided with the upgrade.

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# 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.

## Oil extraction module

- New module focusing on oil yields, oil extraction rates and milling losses
- Standalone WPF application independent of Microsoft Access
- Overall OER monitoring by comparing oil output to FFB harvest
- Recording of mill loss rates at different stages of the milling process via direct measurement of losses
- Control charts and monitoring tools for mill losses
- Bunch analysis results for individual sample bunches for OER benchmark
- Bunch grading (e.g. ripe, underripe, overripe bunches) at mill ramp or in the field
- Correlation of different results with each other and where possible with other field/block parameters e.g. palm age, planting material, seasonality

## Upcoming general improvements

- Daily recording of fertilizer and pesticide application
- Fourth row of data on form and report "Monthly/YTD production"
- Function to load queries from other OMP QW data file
- Allow for month-to-month changes in OMP-GIS base maps
- Improved data analysis for resource use rates
- Options to see more information on number of rounds and average round length on harvesting productivity data analysis form
- New reports for leaf nutrients versus critical and optimal leaf nutrient levels
- Reports to analyze block performance before and after replanting
- New weather dashboard report
- Increased support for server-side recalculation and query computation

## Web service for FS app data transfer

- Alternative web-based method for transferring FS definitions and results between app and OMP database
- Standalone web service application to run on server with public IP next to OMP database
- App function to request new FS definitions from web service
- Reduce unnecessary data transfer, with possibility to resume download in case of interruption
- Function to push new app results to the OMP database via the web service
- User authentication to permit posting of results only for authorized surveyors
- Data recalculation markers to facilitate re-aggregation of FS data after new results are uploaded