

Enabling the adoption of best practices for information management in crop breeding

Efficiency and productivity of many plant breeding programmes can be dramatically improved by the adoption of an integrated information management system. The Integrated Breeding Platform (IBP – www.integratedbreeding.net) provides a unique, comprehensive and easy to use suite of tools for crop breeding. These integrated software applications come together in one complete environment, the Breeding Management System; working together to efficiently collect, store, manage and analyse research data. They accommodate common breeding schemes, from conventional breeding through increasing levels of marker use, and provide access to state of the art analysis and decision support tools.

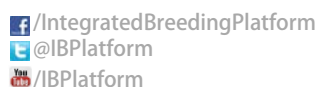
The IBP gives breeders access to up-to-date breeding approaches and to dedicated technology solutions specifically designed to provide them with the tools they need to manage their routine activities. This will result in increased efficiency in targeted breeding programmes, thus reducing the time and resources required to develop improved, more resilient crop varieties for farmers in their regions of operation.

In the context of its deployment strategy, the IBP intends to provide intensive on-site support to facilitate BMS adoption by interested institutes and companies, in the form of a customised installation package. This package includes a thorough assessment of needs and available resources, the collaborative development of an institutional implementation plan, installation of technological infrastructure, migration of historical data, and follow-through support for training and change management. **The following document provides a more detailed description of this deployment approach at an institutional level and is intended as a general guide for the process.**

For more information, please visit our website: www.integratedbreeding.net.



Today's tools
for tomorrow's crops
www.IntegratedBreeding.net



Our Deployment Approach

The IBP will provide intensive professional assistance to help ensure the adoption of technology and best practises by your plant breeders. With the ambition of bringing a new level of service to the agricultural sector, we have developed a thorough and distinctive deployment approach that will ensure that we attend you with consideration for your specific, local circumstances; that you be included in our ongoing development plans; and that we mutually nurture a strong provider relationship.

We are convinced that the BMS will bring more efficiency to your breeding programmes. Adopting new technology is challenging in any type of organisation, but you can count on IBP management, central team and hub staff to be with you at every step of the way:

1. Initial agreement of terms

IBP management, institute managers and other interested partners will first meet for a comprehensive review of BMS functionality to match it to the institute's needs. From this initial assessment, the scope and reach of the project can be established and an IBP implementation team will be assigned to lead it. The first task of this team will be to decide with your institute on the appropriate deployment strategy:




- a. Defining breeding activities, processes and programmes, and whether the need to share data and information is limited or more urgent.
- b. In the case of a multi-programme institute, determining whether to expand the solution across programmes and, if so, at what speed. We recommend gaining experience with the solution through one or two cycles, and then gradually expanding its use across programmes.
- c. Within single programmes, deciding on full or gradual deployment. You could choose to start with the best equipped locations, or to implement components of the BMS suite as stand-alone applications and expand later to the full suite.
- d. Identifying early adopters who will inspire other programmes to follow in the adoption the BMS.

2. Needs assessment

At this step, the implementation team will work in collaboration with your institute's upper management to define the short and longer term deployment objectives on the basis of the programme's current state and trajectory, and upon completion of a short survey to collect baseline data. We will discuss resource levels (human, infrastructure and financial) that would be required and available, and identify key players within your institution to help with implementation, such as potential change managers, application and data managers, champions and early adopters (people and programmes).



Today's tools
for tomorrow's crops
www.IntegratedBreeding.net

 /IntegratedBreedingPlatform
 @IBPlatform
 /IBPlatform

3. Institutional implementation plan

The implementation team will then be reinforced with leads among the institutional key players identified above. This extended team will meet and scope out the detailed implementation plan for the institute, and promote and educate on BMS functionality. Among other specific tasks, this will include:

- a. Matching BMS functionality to your programme's workflows and baseline data, in order to eventually customise the BMS or modify workflows for better adequacy between both (e.g. seed preparation, nursery management, trial management and seed inventory management)
- b. Assigning human and infrastructure resources
- c. Planning data migration and data sharing
- d. Writing up the plan for review by management, and obtaining approval for resourcing.

4. Infrastructure installation

You will have the choice to deploy the BMS in a Cloud or LAN environment, or as local stand-alone solution. The implementation team will set up the preferred infrastructure with the help of IT support staff from the IBP Hub in your region. It will work closely with application and data managers identified in your institution to set up and customise programme settings; team member accounts; breeding and testing locations; nomenclature for germplasm; lists, trials and nurseries; and breeding methods.

5. Data migration and configuration

At this step, the IBP implementation team will continue to closely accompany your institute's application and data managers to undertake the migration of historical data into the system and to modify field and lab processes as required for an optimal use of the BMS. This could include reviewing trait lists, setting up nursery and trial templates, labels and bar codes; establishing data collection practices with fieldbooks or hand held devices; and configuring seed management and storage processes.

6. Change management and support

The IBP implementation team, in conjunction with staff from the IBP Hub in your region, will work closely with your institution's early adopters to identify and customise appropriate training material. Intensive training of all institutional users will then take place under the leadership of your application manager(s), who shall also work on call for breeders on each step of the breeding process during their first cycles using the BMS. IBP expertise will remain available as needed, chiefly through your local IBP Hub. Following this initial period of intensive assistance, continued technical support will be ensured by IBP regional hubs, under the coordination of the IBP central team. Individual users will also be able to contact our Help Desk directly and at any time through our main portal site at www.integratedbreeding.net.



Today's tools
for tomorrow's crops
www.IntegratedBreeding.net

