

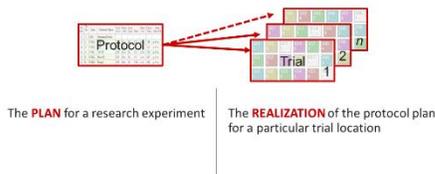


Introduction to Protocols

In this video, we introduce the first component of an experiment – the protocol.



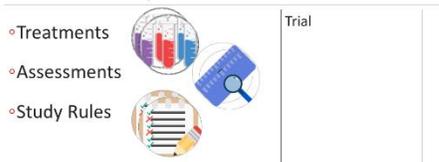
Elements of a study



In ARM, a protocol is a plan for an experiment. Essentially it is a *template* containing the design and instructions to perform trials.

The protocol is then used to create a trial, which is the *realization* of the plan. Multiple trials can be created from a single protocol, for different trial locations in the study.

Protocol Components

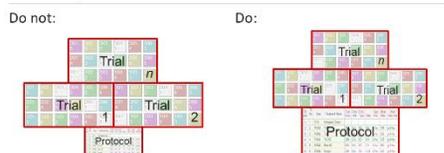


A protocol primarily consists of:

- treatments to test,
- planned assessments, and
- study rules to enforce requirements.

All of the information entered in the protocol is copied and used in the trial.

Incomplete Protocol -> Inconsistent Trial



It may be tempting to throw together a quick protocol in order to generate a trial and start entering data, but an incomplete protocol will lead to inconsistent results.

Instead of setting up the protocol to *create trials*, you should set up your trials *by filling out* the protocol.



A Complete Protocol

◦ Treatment and application information

Product quantities required for listed treatments and applications across multiple studies:

Amount	Unit	Treatment Name	Form Conc	Form Unit	Form Type
28.212	ml	Banvel 720	2.0	LBA.GAL	L
47.026	ml	FalcoMaster	2.1	LBA.GAL	SC
29.743	ml	Maronox	3.2	LBA.GAL	F
5.827	ml	Clasfy	58.1	%	SC

*Per area calculations based on spray volume=300 L/HA, mix size= 3.25 L (mix size basis)
 *Product amount calculations increased 25 % for overage adjustment.
 *Product amounts adjusted for the 10 trials planned for this protocol.

◦ Planned assessments

Pest Code	AMAPA	AMAPA	AMAPA
Rating Type	CONTRO	%CONTROL	
Rating Unit	%	0-100	0-100

◦ Study Rules



Enter Treatment and Application details to communicate exactly how the treatments should be formulated and applied. Clear descriptions can eliminate follow-up questions or miscommunications - which could ruin a trial!

(The Protocol Product Amount Totals report can calculate the amount of product needed across all trials planned for the study.)

Entering planned assessments will communicate to the trialist what data must be recorded for this experiment. Having this information pre-filled in the trial also ensures that data is entered consistently.

Here is an example of a simple % control assessment that was entered 3 different ways by 3 different people. Spending just 1 more hour to add assessment headers can save 10 hours of standardizing trial data that was entered in different ways. (Selecting terms from the ARM dictionaries also cuts down on this "diversity" in entering information.)

Leveraging study rules also improves consistency of trial data, and protects critical information. Study rules communicate important data fields that should be completed, define requirements, restrict trialists from changing key information, and can even hide confidential information when necessary.