

ITMF-ICCTM Stickiness task force

Results of the 2017 international round-test of stickiness measuring methods (HarCoStiC)



Jean-Paul Gurlot, Serge Lassus, Axel Drieling, Karsten Froese
Bremen, March 2018



Stickiness in spinning mill due to entomological sugars

These sugars or honeydew are mainly produced by *Aphis* and *Bemisia*, ...
but new insects are coming (mealybug, ..., due to resistance, GMO...)

Aphis gossypii



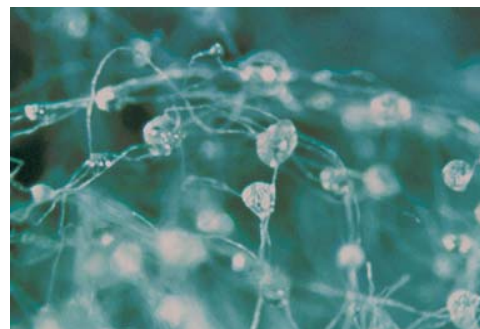
Honeydew on open boll



Bemisia tabaci

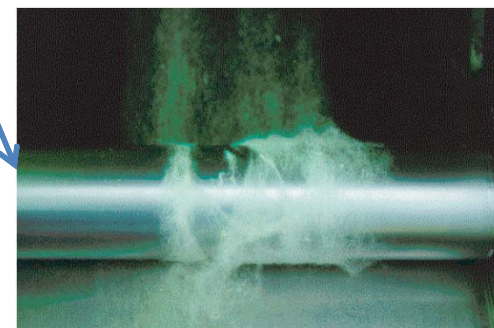
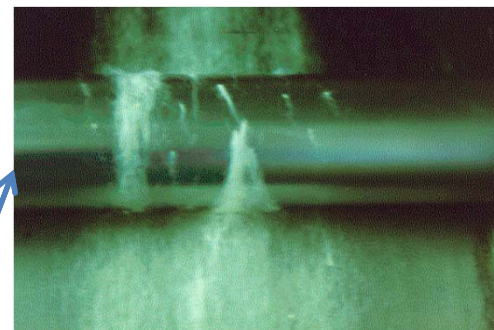


Honeydew in fibers



Problems

Productivity, quality 



=> Need for reliable characterization (method, reference material, predictive of problems in spinning...)

Reminder

Two of the mandates of the ICCTM are:

[.../...] “to harmonize cotton testing results by means of:

- a. proposition and support for the international standardization of test methods
- b. development of guidelines for testing
- **c. technical evaluations using world-wide round tests.**

and to discuss the problems related to testing of cotton fiber properties and their relations to cotton processing.”

[.../...]

Objectives of ICCTM: past results (1/3)

- To check the ability of each measuring technique to reproduce itself within a same single laboratory
- To check the ability of each measuring technique to reproduce itself between several laboratories
- To give some indications about the ability of various measuring techniques to correlate to each others

Reminder

One RT conducted in 2013-2014

=>report 2014 and 2016 (instruments vs micro-spinning)

➔need harmonization

➔need creation of reference materials

- To check the ability of each measuring technique to reproduce itself within a same single laboratory
- To check the ability of each measuring technique to reproduce itself between several laboratories
- To give some indications about the ability of various measuring techniques to correlate to each others

Reminder

One RT conducted in 2013-2014

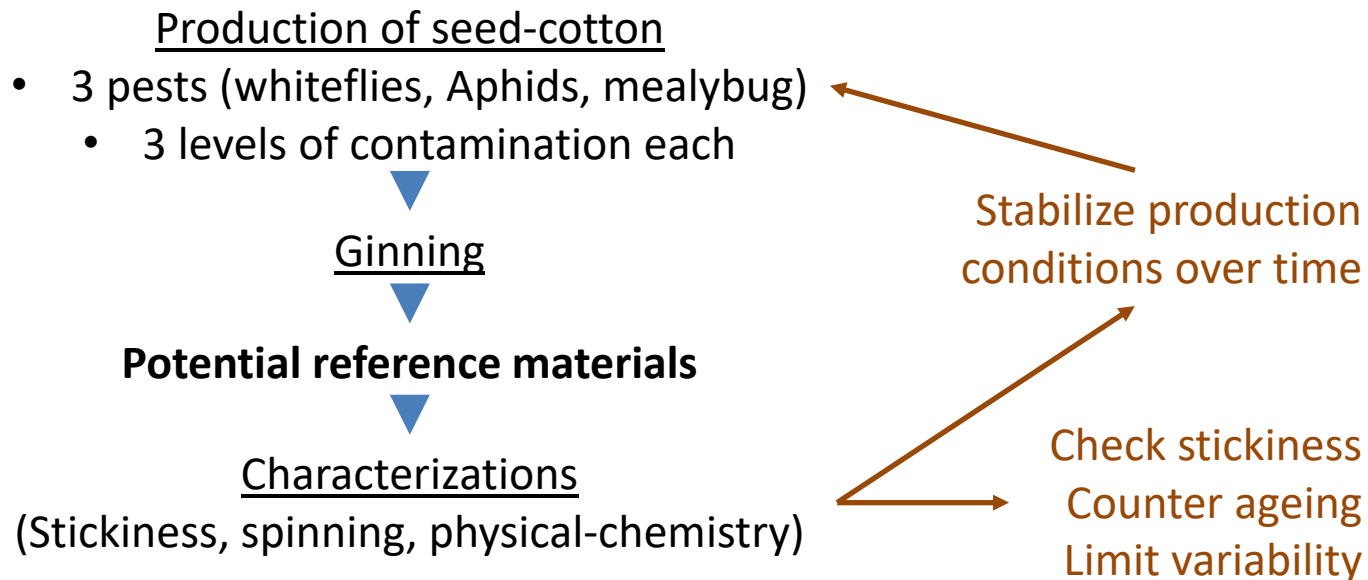
=>report 2014 and 2016 (instruments vs micro-spinning)

→need harmonization

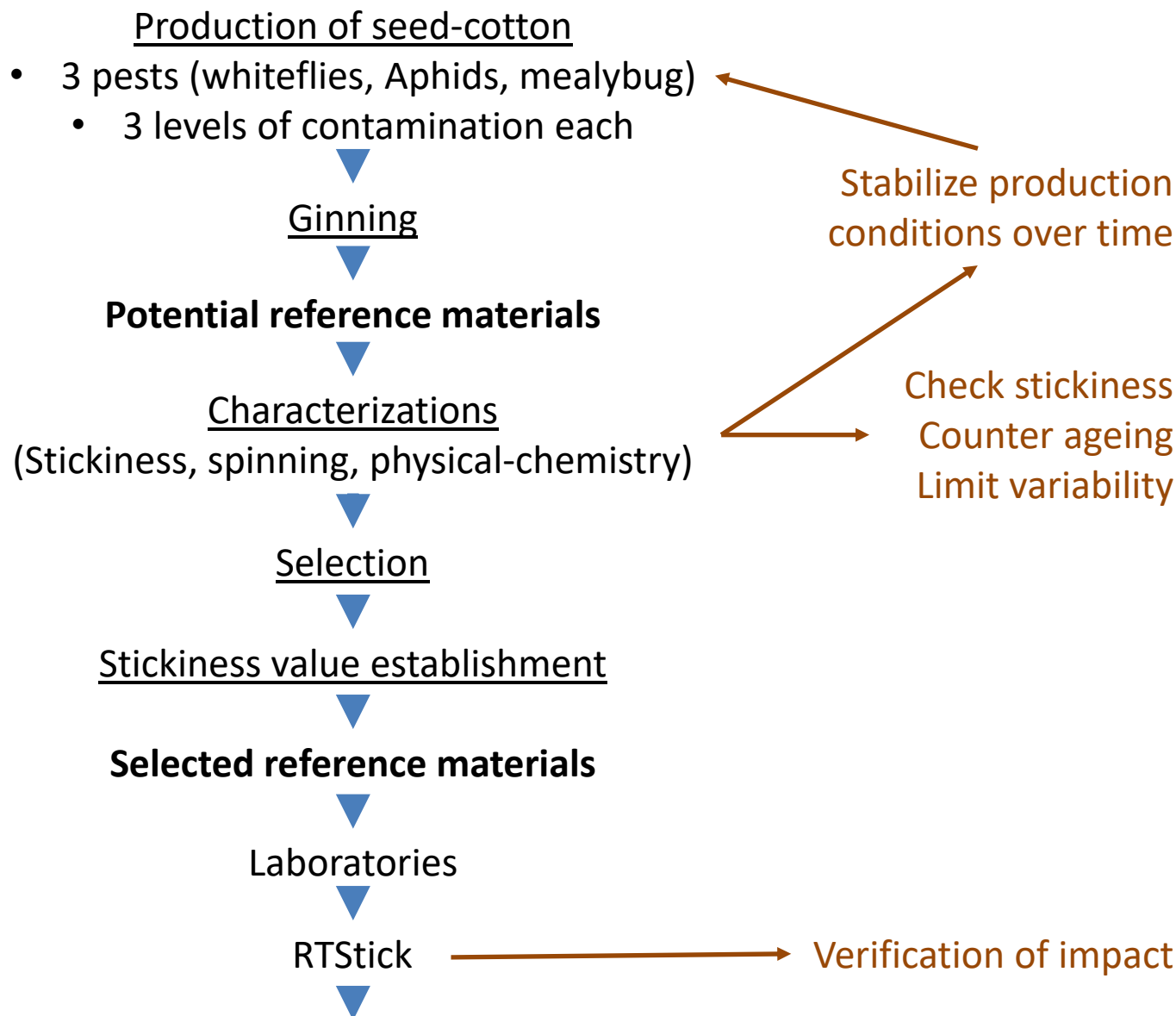
→need creation of reference materials

→proposed project

Proposed project HarCoStiC



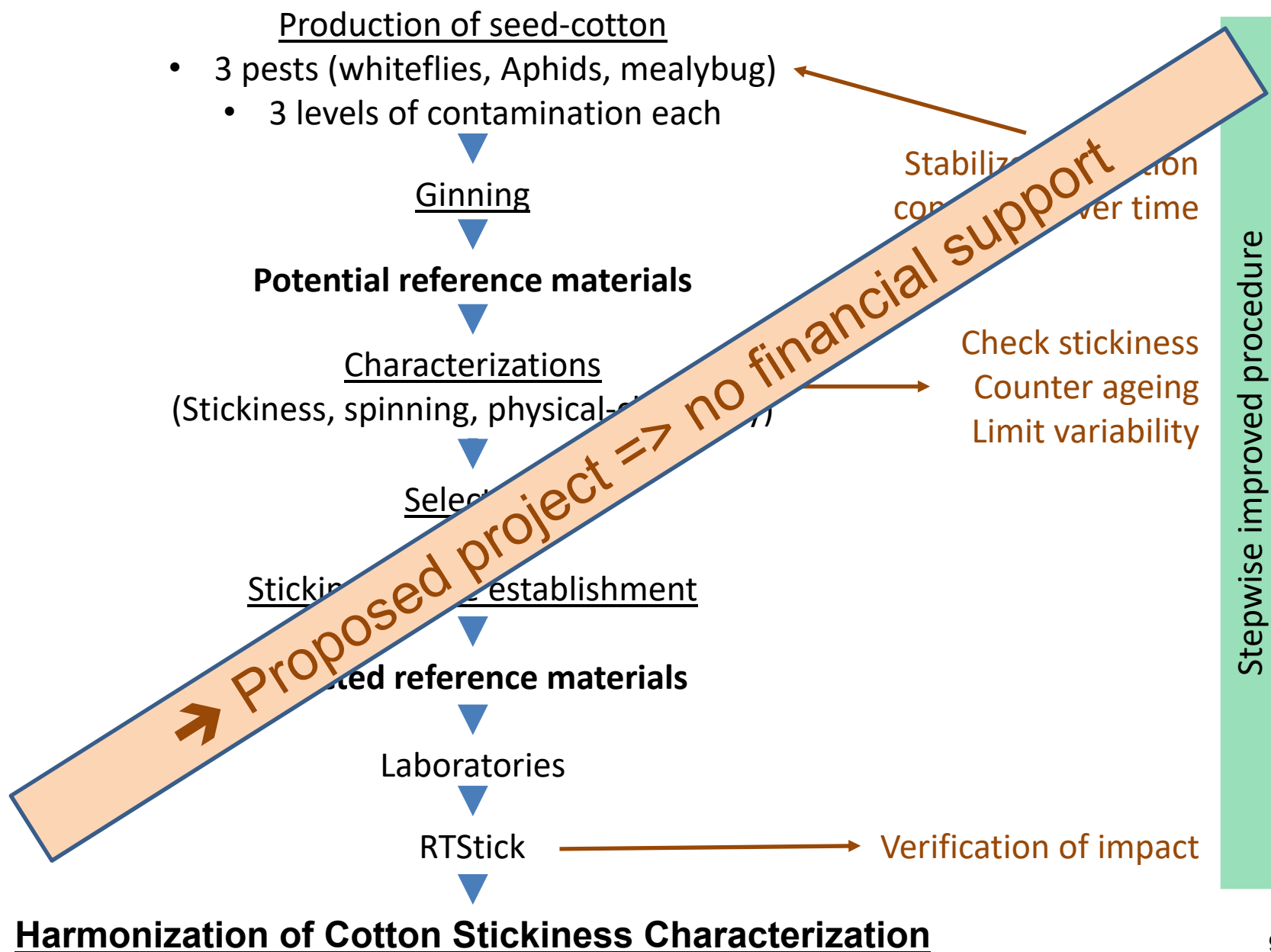
Proposed project HarCoStiC



Stepwise improved procedure

Harmonization of Cotton Stickiness Characterization

Proposed project HarCoStiC



Proposed project HarCoStiC

