

MULTz - A NON-STICKY TRAP DESIGN SUITABLE FOR THE MONITORING OF SOME JEWEL BEETLES IN EUROPE INCLUDING EAB

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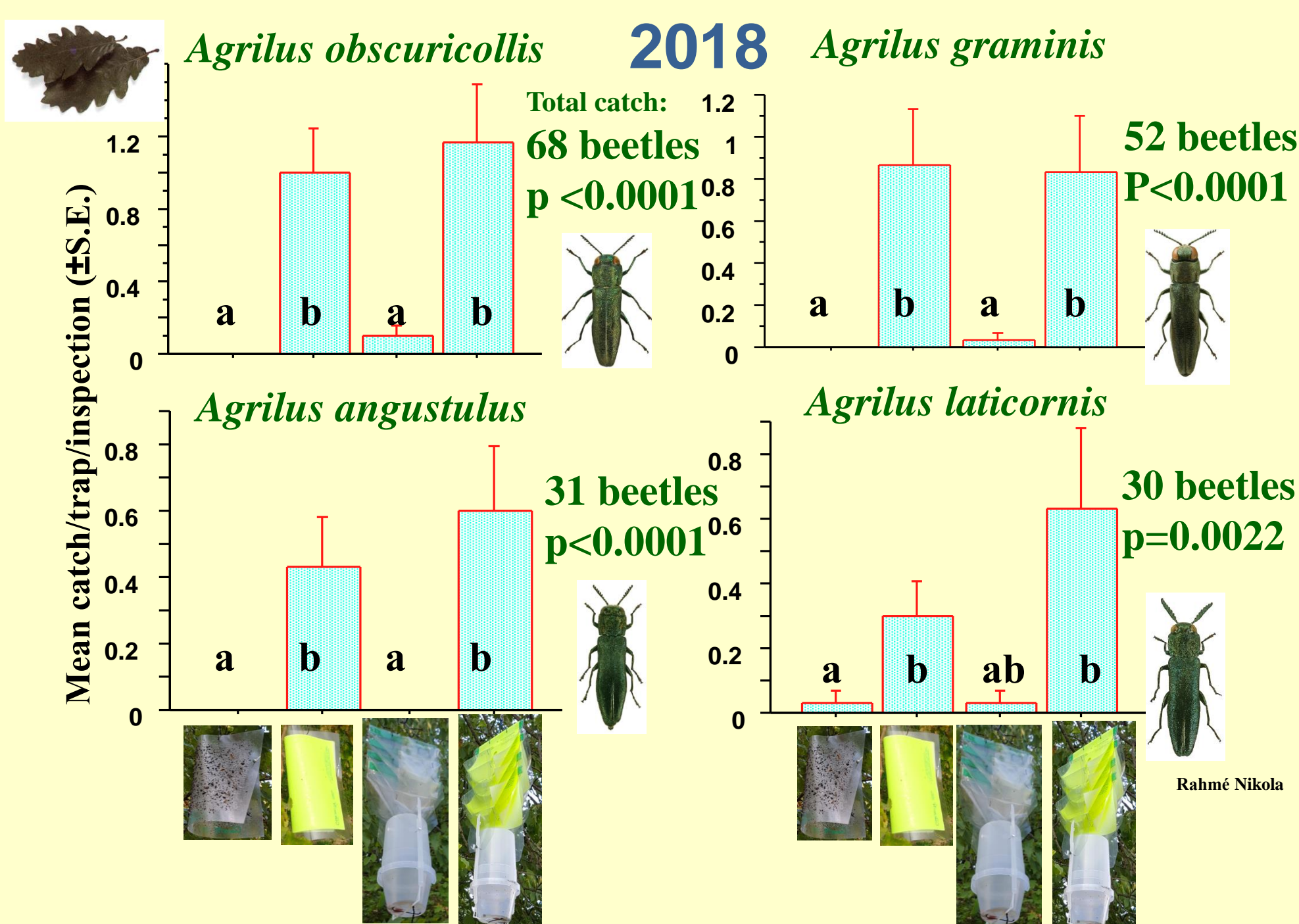
A light, easy to handle and maintain non-sticky trap type could facilitate monitoring and detection of *Agrilus planipennis* Fairmaire (EAB) (Buprestidae, Coleoptera) and other jewel beetle populations. Sticky material-free jewel beetle catches are highly advantageous because there is no need to clean them with chemicals before determining to species.

We carried out a series of trapping experiments in an ash (*Fraxinus pennsylvanica* Marshall) forest belt, an oak forest (*Quercus petraea* [Matt.] Liebl.) to test our latest experimental non-sticky trap designs.

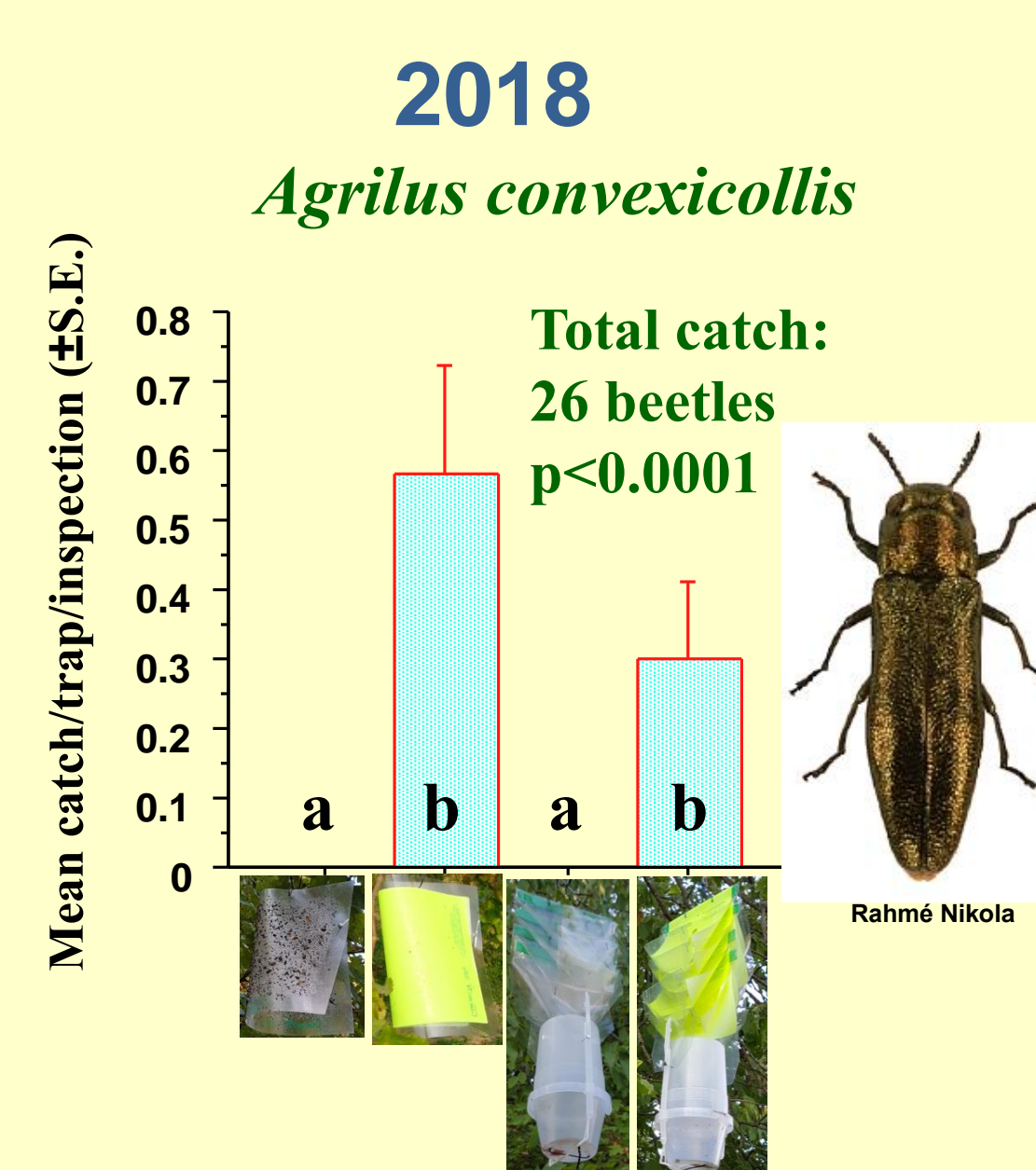


Our first results suggested that the light green MULTz trap design may be suitable for catching a multitude of buprestid species in Europe, including the ash-related *A. planipennis* and *A. convexicollis* Redtenbacher, some of the European oak-related *Agrilus* species and the cypress jewel beetle, *Ovalisia festiva* (Linnaeus).

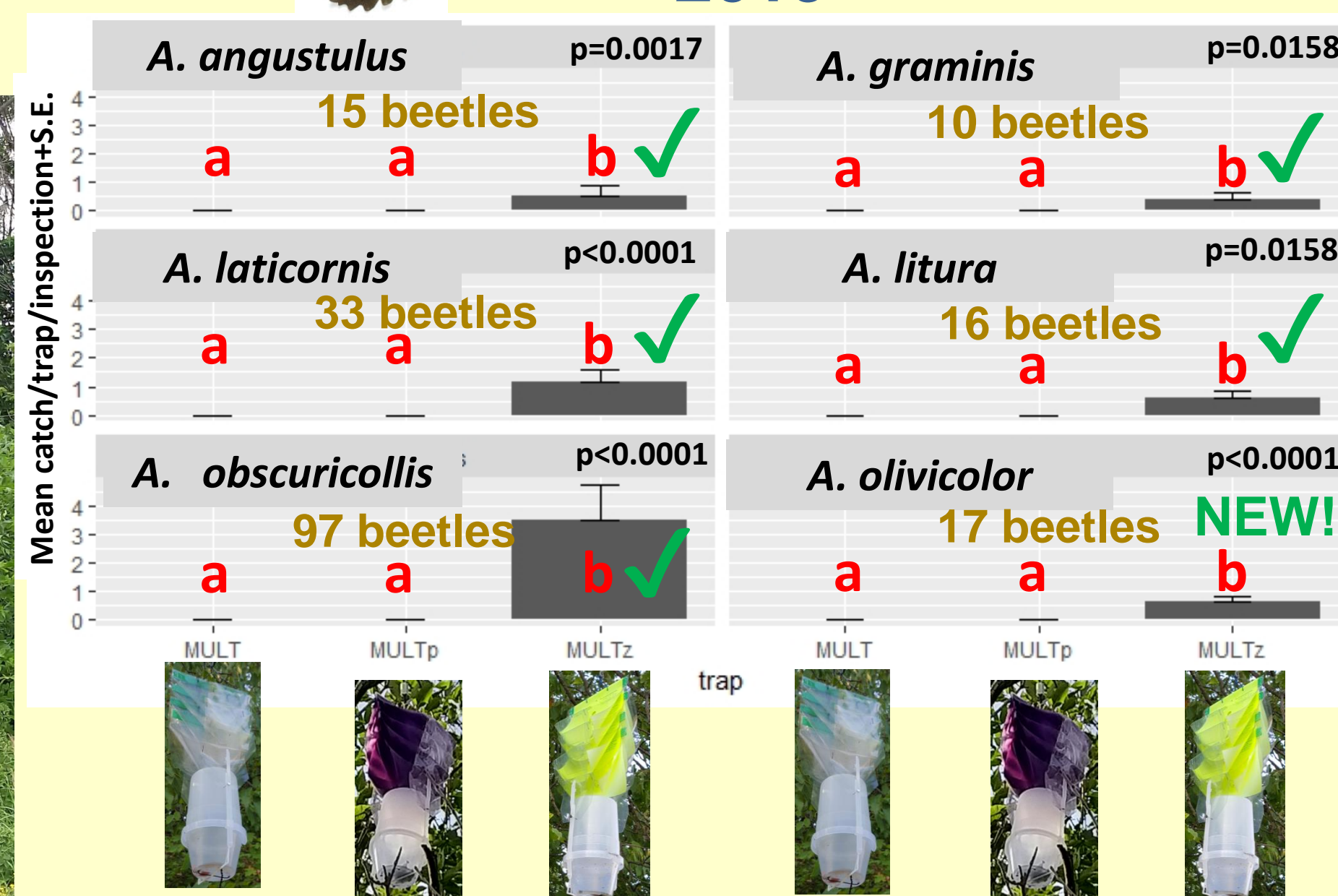
Oak (*Quercus*) related



Ash (*Fraxinus*) related



Oak (*Quercus*) related 2019



Small catches of 5 Agrilus spp. pooled

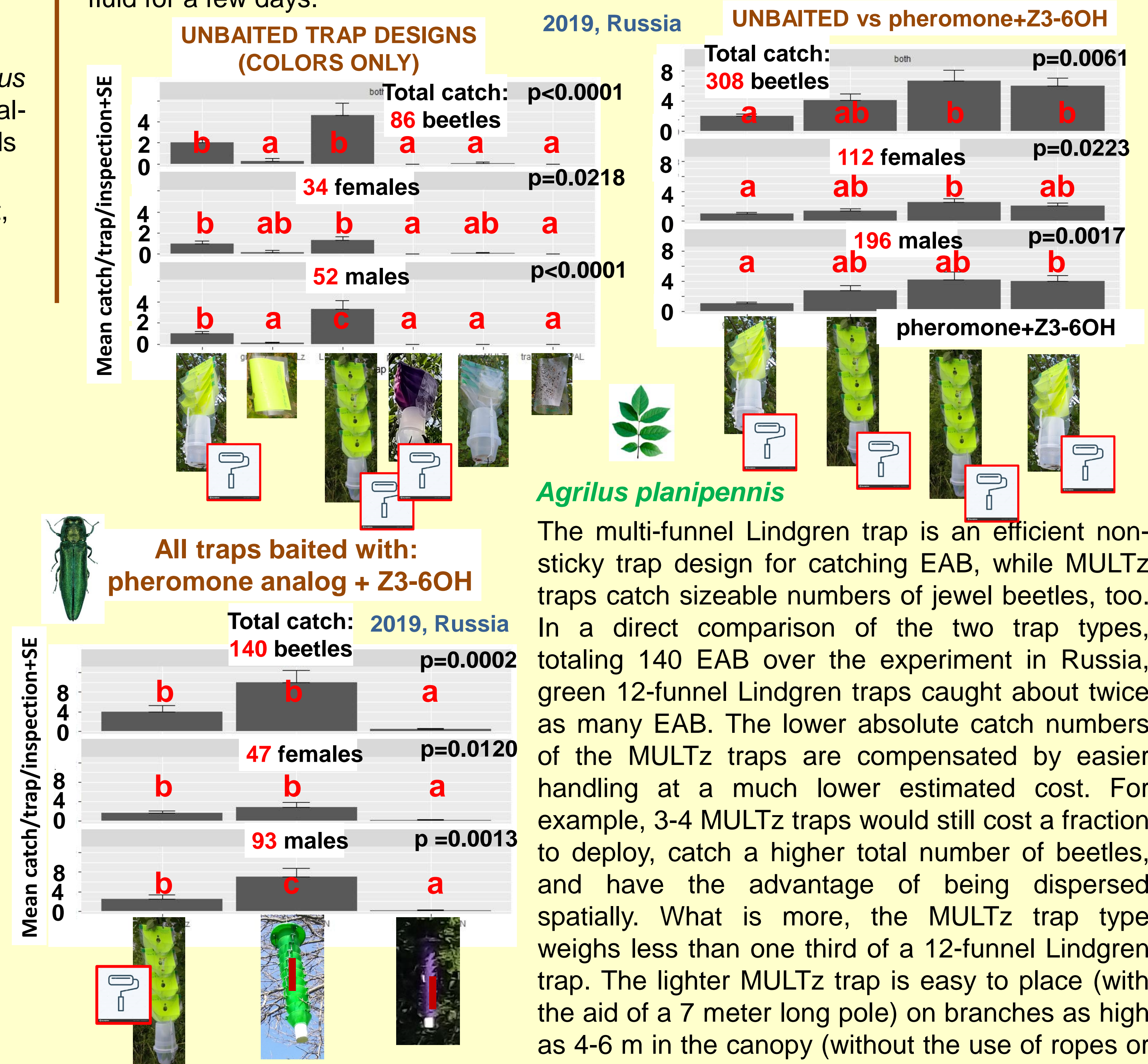


Trap handling with a pole

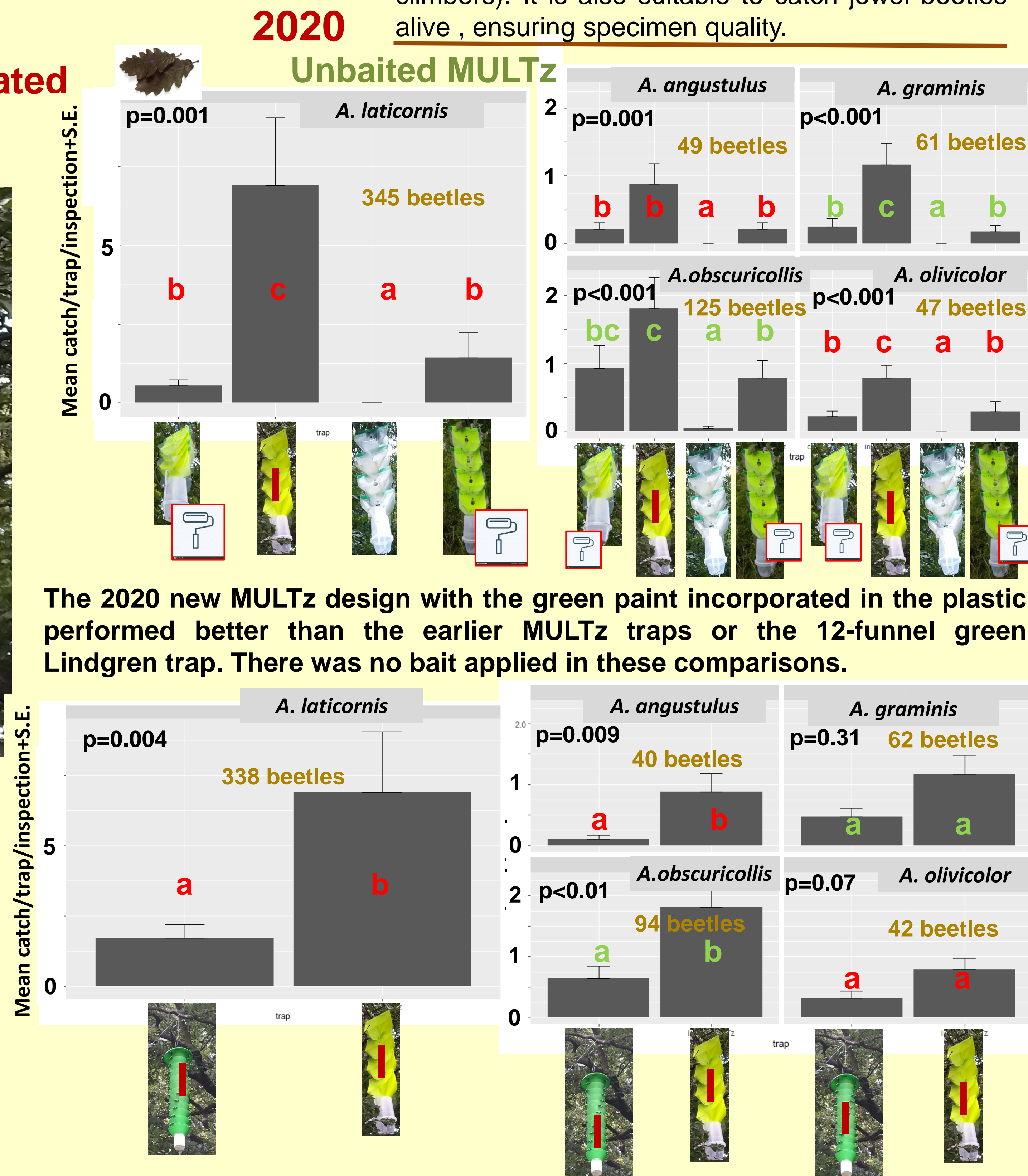
Both the sticky and multi-funnel traps were suspended by a piece of wire attached to an "R"-shaped rigid metal wire hook (about 80 g), suitable for hanging on the higher branches of trees. A 20 cm-long rigid wire hook was fixed at right angles to the end of a 7 m-long pole (carbon-fibre telescopic fishing stick). With this pole, we were able to easily hang the traps at a height of about 4 – 5 m, where the population density of flying jewel beetles was expected to be greater.

Agrilus planipennis

In all colors of MULT trap types, all over the EAB experiments fresh ash leaves were placed to retain beetles in the catch container. Most beetles were alive when removed from the traps suitable to be used for other experiments. For monitoring purposes we need the beetles dead the use of an insecticide spray is recommended, so the beetles caught are intact and in a good condition for determination compared to sticky or fluid based traps where the beetle bodies are often broken or fall apart when kept in the fluid for a few days.



paint incorporated design



The 2020 new MULTz design with the green paint incorporated in the plastic performed better than the earlier MULTz traps or the 12-funnel green Lindgren trap. There was no bait applied in these comparisons.

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