

TEST: Ultra Turrax Tube Drive

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Other This protocol is published without a DOI.

IBA



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ABSTRACT

Evaluation of tubes for the Ultra-Turrax Tube Drive instrument from IKA

Date: 10th February 2021

Consumables: 1 petri dish; 5 steel beads

Tubes:

- plastic rotor stator element ("rs")
- 10 provided steel beads (5 mm) ("steel10")
- 10 provided glass beads (6 mm) ("glass")
- 10 provided steel beads + 5 steel beads from DNA lab (3 mm?) ("steel10+5")
- disperser with metal rotator ("disp")

Test sample:

SYM37M; L1

Instrument settings:

6000 rpm

Homogenization for 30s + 30s

Evaluation:

The rs created the smallest pieces, while the beads created the largest pieces. The disp was somewhere in between.

Future prediction:

A rotor element in steel would probably work even better than the plastic rs. The Tube Mill 100 instrument could work well.

PROTOCOL CITATION

Nannie 2021. TEST: Ultra Turrax Tube Drive. **protocols.io**

<https://protocols.io/view/test-ultra-turrax-tube-drive-bsdcna2w>



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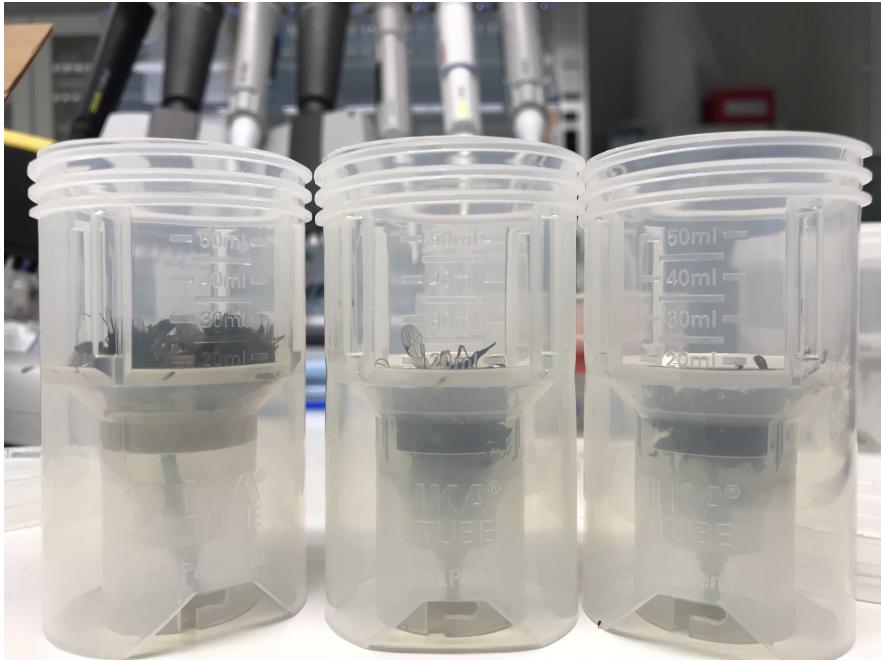
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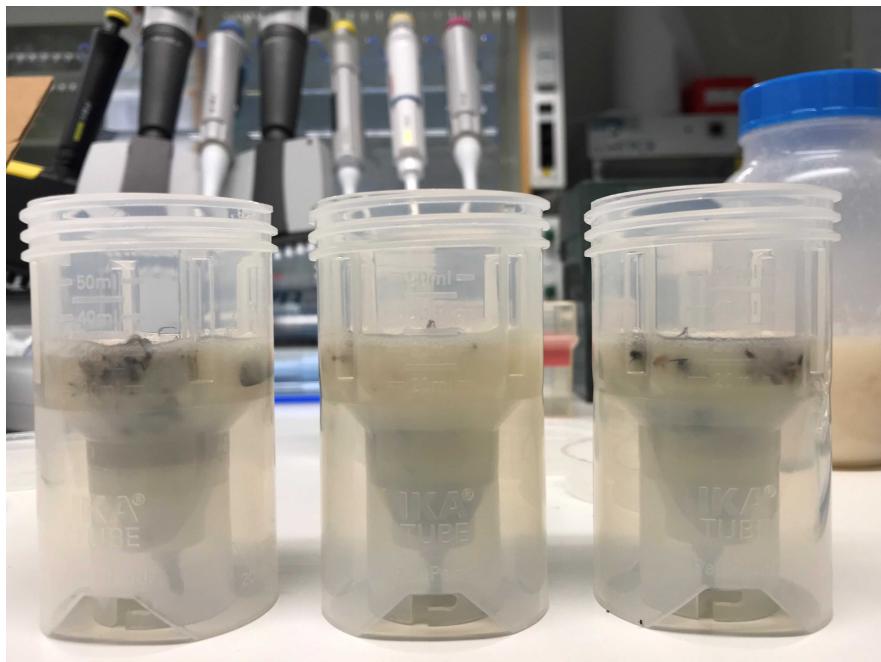
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Insects from sample SYM37M added to rs, steel10 and glass, respectively.



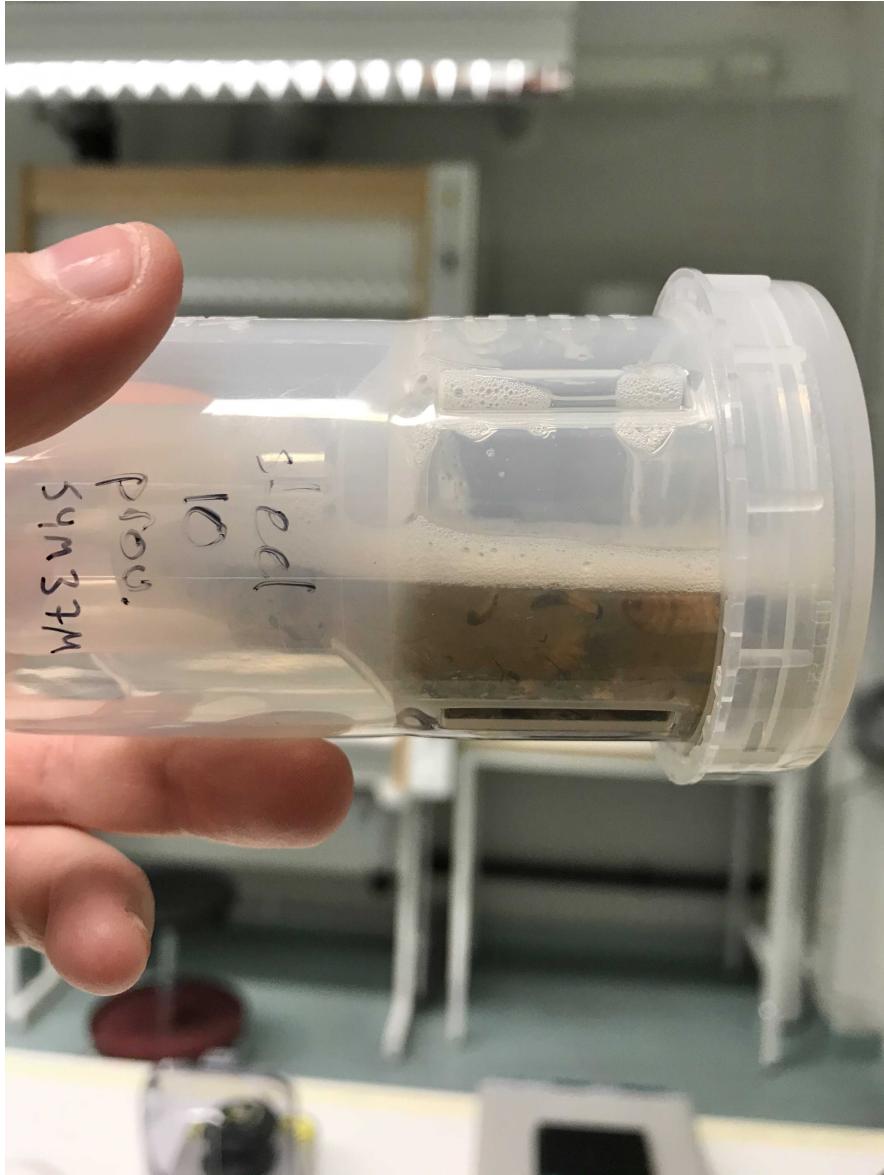
Thawed lysate L1 added to 30 ml in the same tubes.

rs on the instrument (second 30s run).

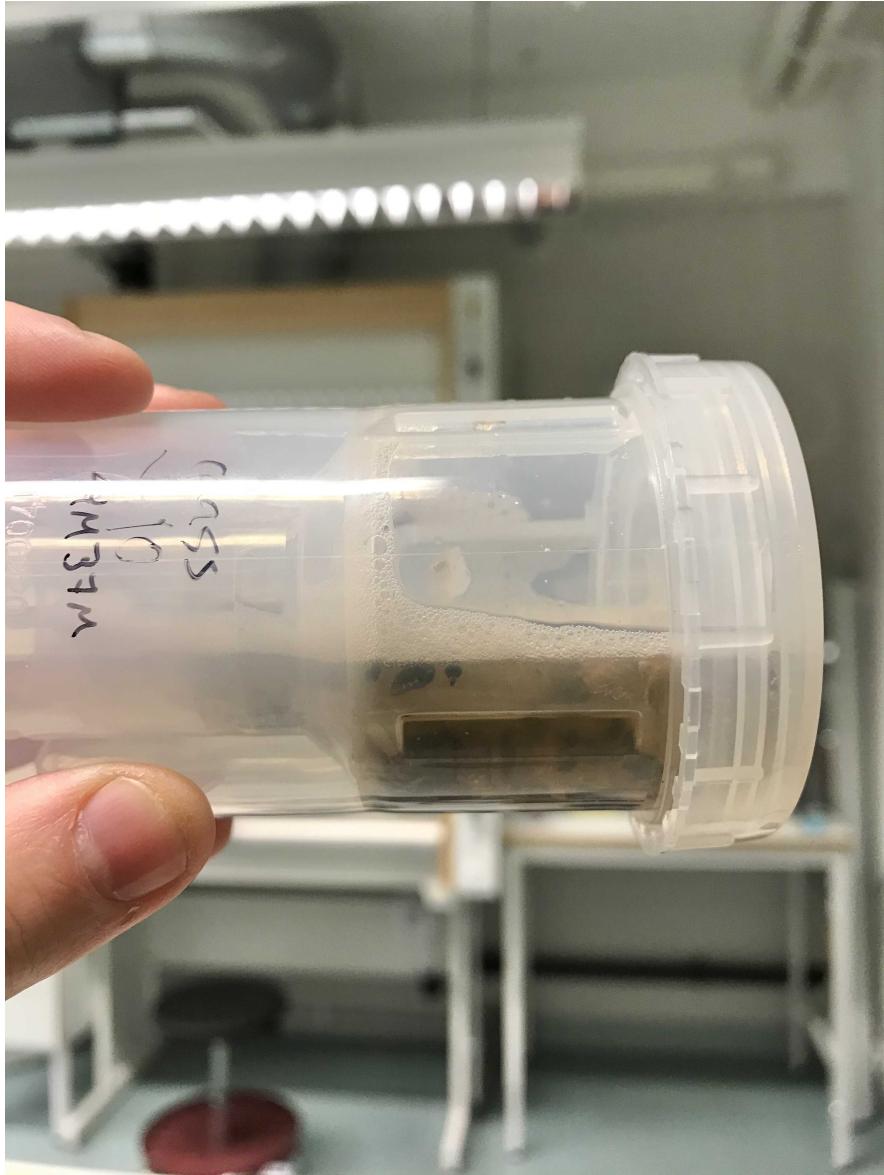
Steel10+5 on the instrument (second 30s run).



Result for rs after 75s.



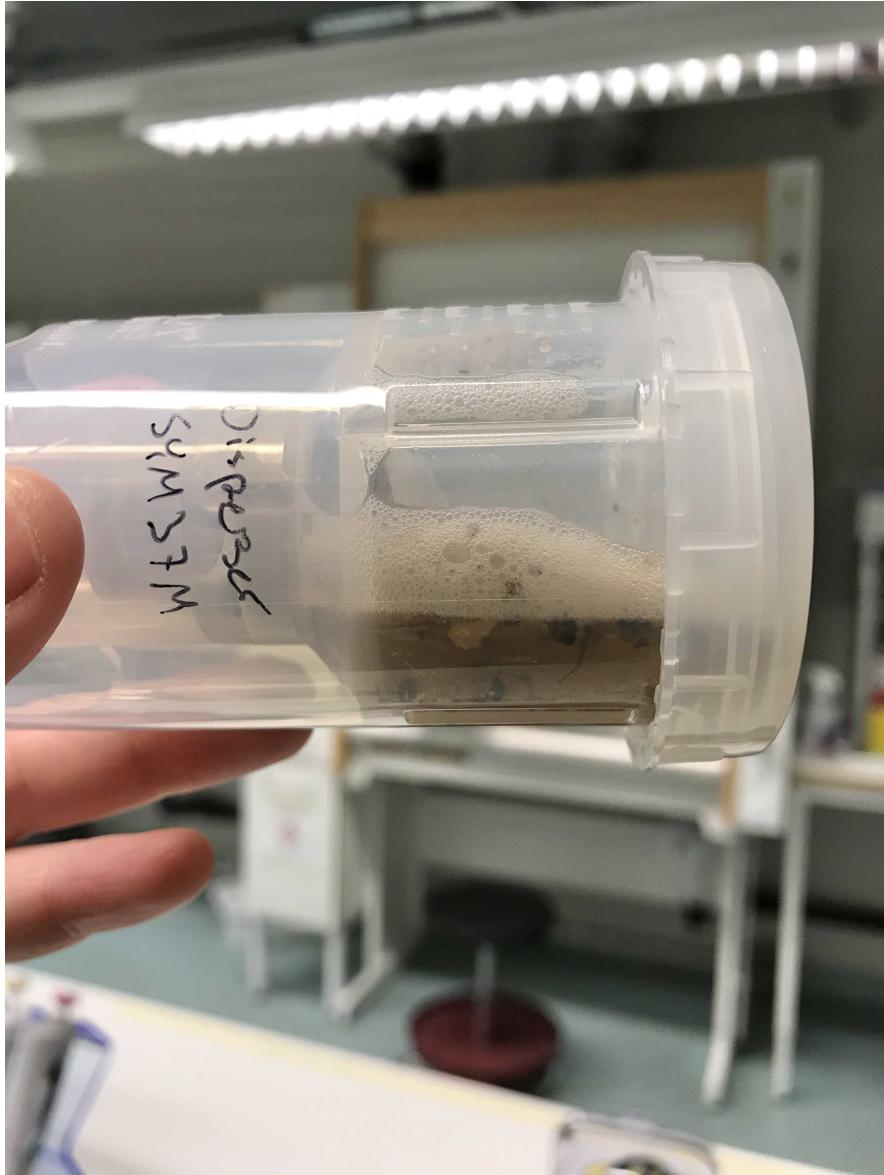
Result for steel10 after 60s.



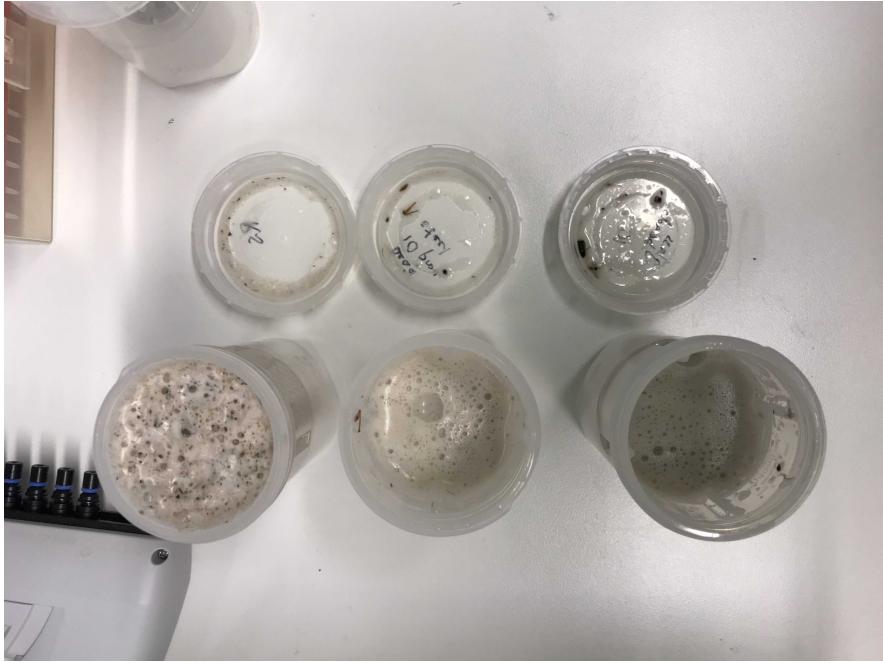
Result for glass after 60s.



Result for steel10+5 after 60s.



Result for disp after 60s.



From top to bottom: rs, steel10, glass



From top to bottom: disp, steel10+5