

TEST: Ultra Turrax Tube Drive V.2

Nannie¹

¹NRM

Version 2 ▾

Feb 17, 2021

Other

This protocol is published without a DOI.

IBA



Nannie

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ABSTRACT

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

Date: 10th February 2021 + 17th February 2021

Consumables: 1 petri dish 5 steel beads;

Tubes:

10/2

- 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 (3.2 mm) ("steel10+5")
- disperser with metal rotator ("disp")

17/2

- rs ("ll")

- 10 provided steel beads + 5 steel beads from DNA lab (3.2 mm) + 10 silica beads (2.3 mm) ("10+10+10")

Test sample:

SYM37M; L1

Instrument settings:

10/2

6000 rpm

Homogenization for 30s + 30s

17/2

6000 rpm

Homogenization for a total of 120s

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-bsg2nby>

Version created by Nannie



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CREATED

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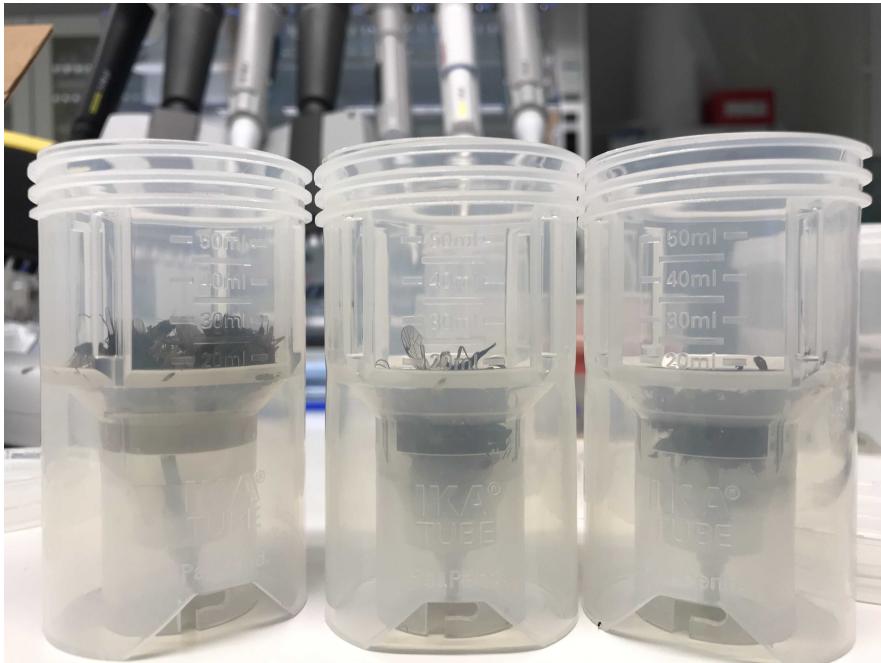
LAST MODIFIED

Feb 17, 2021

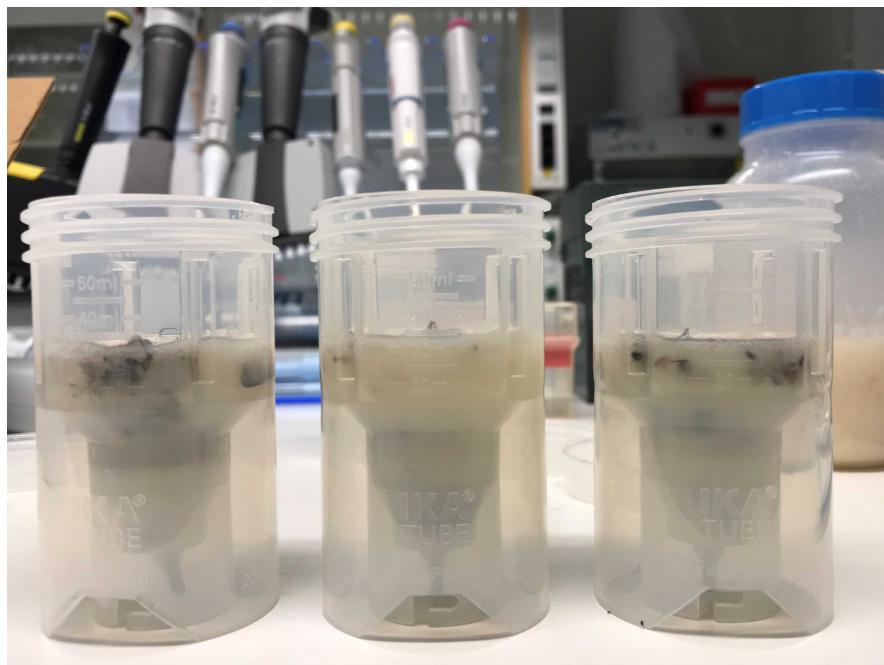
PROTOCOL INTEGER ID

47354

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



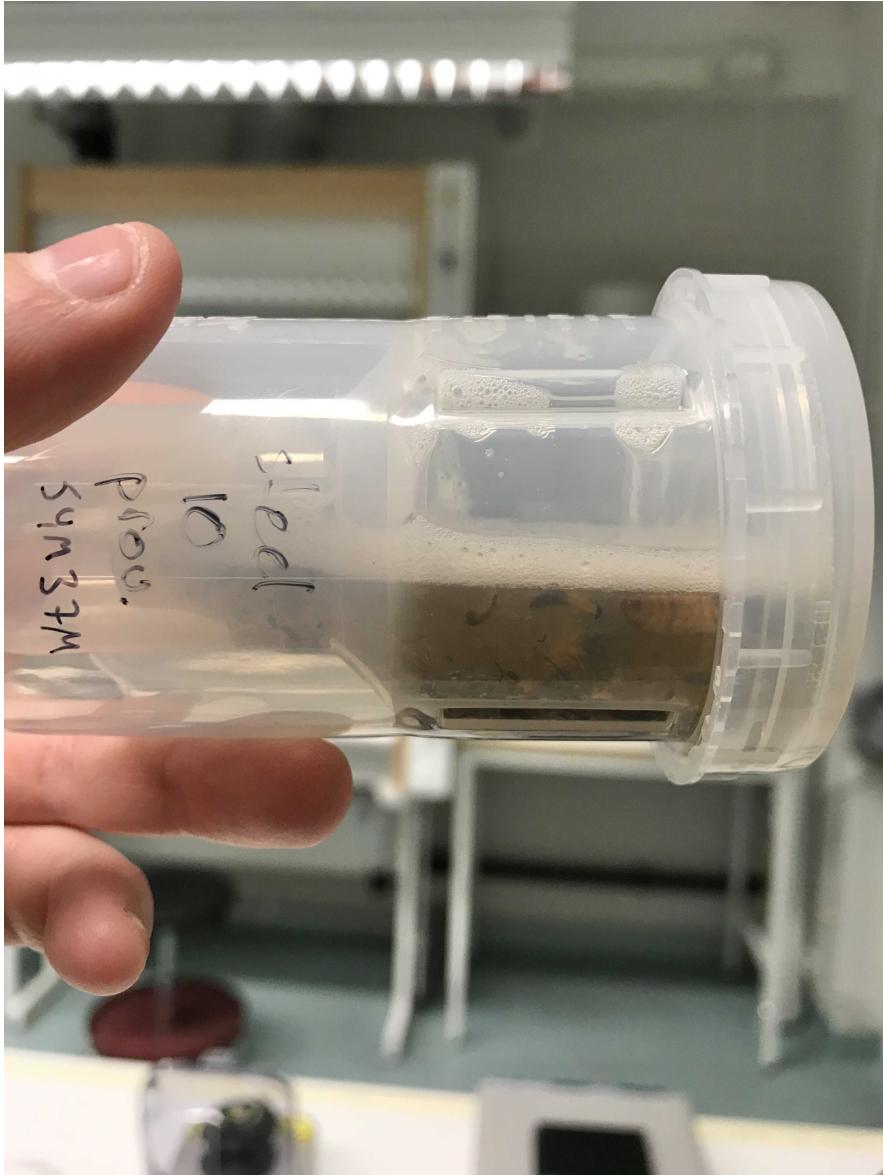
Thawed lysate L1 added to 30 ml in the same tubes.

rs on the instrument (second 30s run).

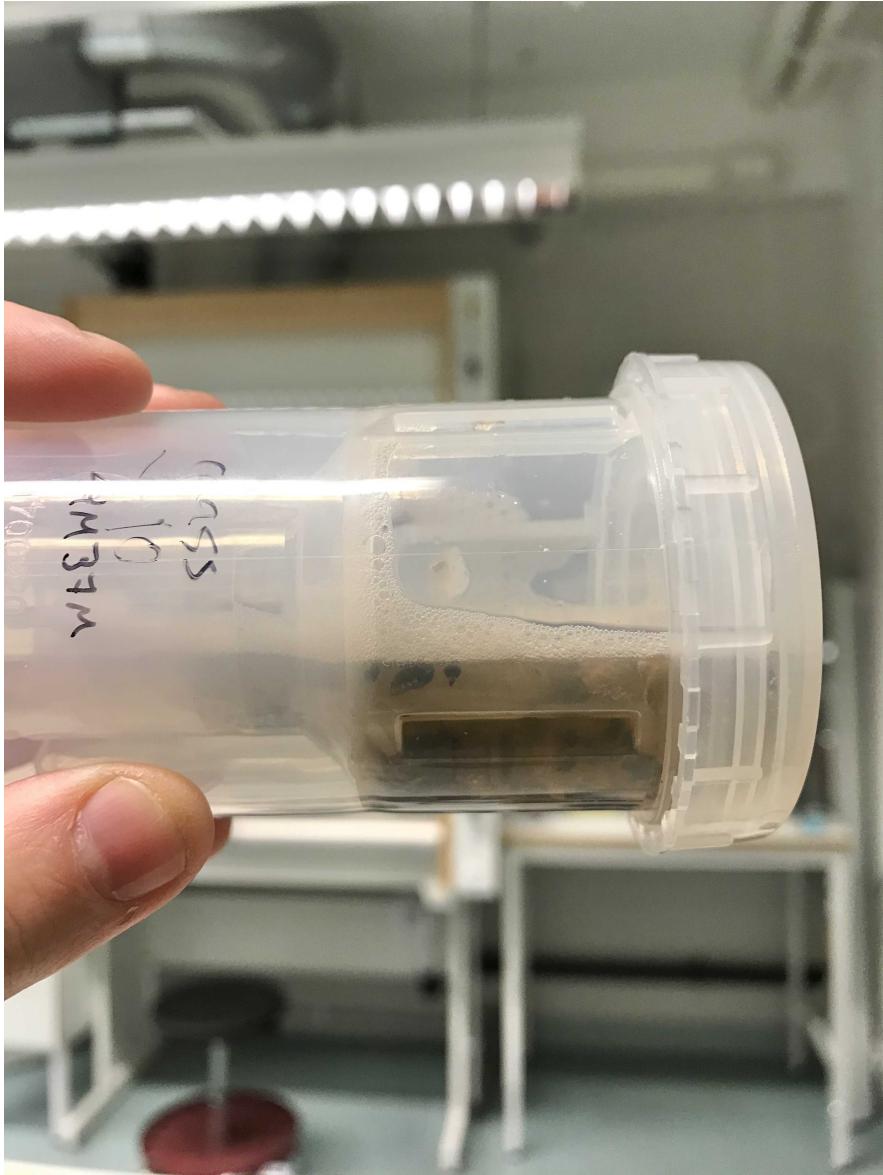
Steel10+5 on the instrument (second 30s run).



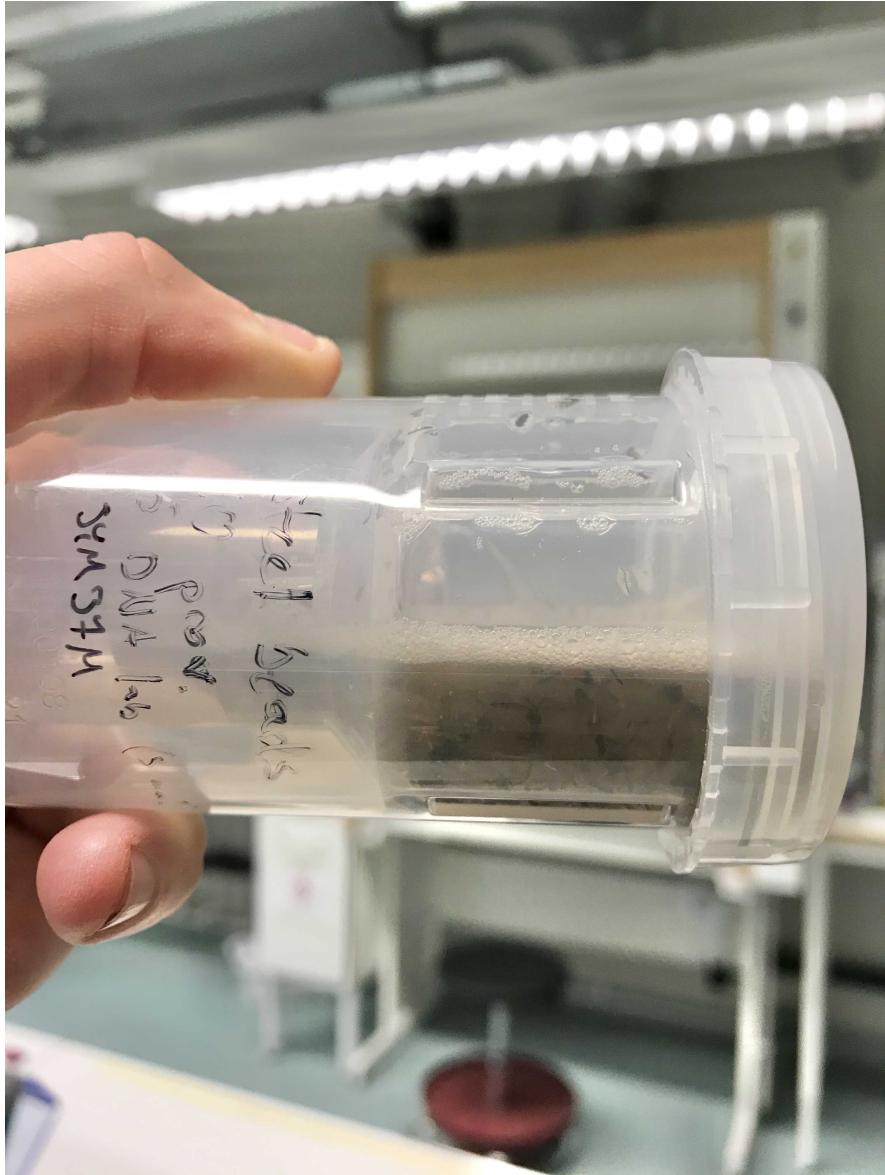
Result for rs after 75s.



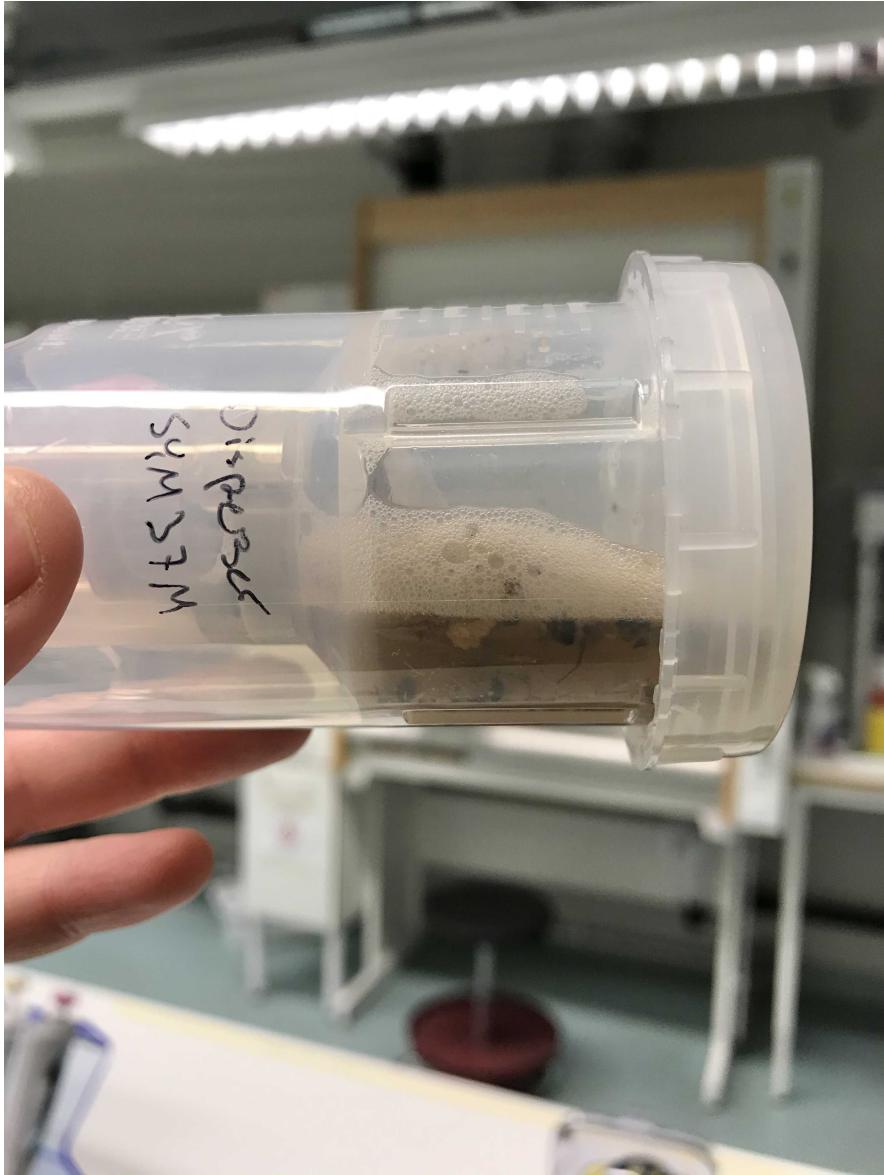
Result for steel10 after 60s.



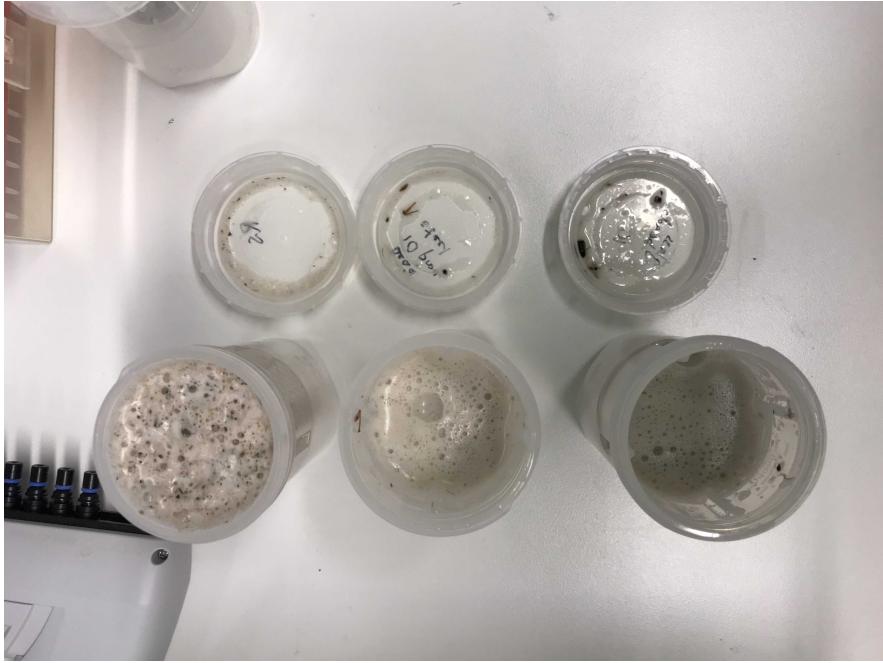
Result for glass after 60s.



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