



Nov 15, 2020

# Video protocol for sorting Drosophila pupae

Carolyn Elya<sup>1</sup><sup>1</sup>Harvard University

1

Works for me

[dx.doi.org/10.17504/protocols.io.bpq3mmyn](https://dx.doi.org/10.17504/protocols.io.bpq3mmyn)

Carolyn Elya

Harvard University

## ABSTRACT

This is my favorite way to sort pupae.

Credit to Tom Alisch & Dave Zucker (@FlySorter) for discovering a new use for transparencies!!

## DOI

[dx.doi.org/10.17504/protocols.io.bpq3mmyn](https://dx.doi.org/10.17504/protocols.io.bpq3mmyn)

## PROTOCOL CITATION

Carolyn Elya 2020. Video protocol for sorting Drosophila pupae. **protocols.io**  
<https://dx.doi.org/10.17504/protocols.io.bpq3mmyn>

## LICENSE

This is an open access protocol distributed under the terms of the [Creative Commons Attribution License](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

## CREATED

Nov 15, 2020

## LAST MODIFIED

Nov 15, 2020

## OWNERSHIP HISTORY

Nov 15, 2020  Lenny Teytelman protocols.io

Nov 15, 2020  Carolyn Elya Harvard University

## PROTOCOL INTEGER ID

44539

## ABSTRACT

This is my favorite way to sort pupae.

Credit to Tom Alisch & Dave Zucker (@FlySorter) for discovering a new use for transparencies!!

### 1 Video summary of the method:

- 2 Cut out a small piece of a projector sheet (e.g. Hygloss Overhead Projector Sheets, [https://www.amazon.com/Hygloss-75910-Products-Transparency-Projectors/dp/B077762QK5/ref=sr\\_1\\_8?dchild=1&keywords=transparency&qid=1605473049&sr=8-8](https://www.amazon.com/Hygloss-75910-Products-Transparency-Projectors/dp/B077762QK5/ref=sr_1_8?dchild=1&keywords=transparency&qid=1605473049&sr=8-8)).

You'll want to make sure the piece is long enough to completely cover the inside of the vial and not so wide as to reach beyond the surface of the food. Measure diameter of the vial mouth to determine a suitable length ( $d \cdot \pi + \sim 1 \text{ cm}$ ) and space between food and cap to determine width.

- 3 Roll up the projector sheet and place into a vial any time before flies reach 3rd instar.
- 4 Pull out the transparency after pupation.
- 5 Sort pupae using a paintbrush, using water to dissolve the glue holding pupae to the projector sheet. Placing a Kimwipe under the projector sheet will help you maintain a clean workspace and prevent inter-vial contamination.
- 6 Pupae can be directly transferred to a new vial with food or placed on a new piece of projector sheet which can then be rolled up and placed into a vial.
- 7 Between genotypes, check paintbrush bristles for any adhered larvae or pupae and remove before proceeding. Rinse paintbrush thoroughly with water and 70% ethanol to decontaminate.