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Plant Infiltration for *Mimulus in Planta* Transformation

 In 1 collection

DOI

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DOI: <https://dx.doi.org/10.17504/protocols.io.3rtgm6n>

External link:

http://mimubase.org/FTP/Protocols/Stable_Transformation/Mimulus%20in%20planta%20transformation.pdf



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Protocol status: Working

We use this protocol and it's working

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Abstract

This protocol is part of a **collection for *Mimulus in planta* transformation**.

Attachments



Mimulus in planta tr...

39KB

Troubleshooting


Safety warnings

! See SDS (Safety Data Sheet) for hazards and warnings.

Before start

Ideally want 8-12 young healthy plants in square pots that have branched and have lots of buds for infiltration (When plants are young, cut/pinch the plants so that they will be short and branched).



- 1 Trim off mature buds from the plants.
- 2 Gently peel back the leaves around the young buds.
- 3 Spray the young buds 2-3 times with the Agro (spray right before they will be put in the vacuum).
- 4 Vacuum infiltrate 1-2 plants at a time. pull a vacuum until 29 inches Hg, seal the vacuum and turn off the pump, wait 2 minutes, then release the vacuum.
 - 4.1 Pull a vacuum until 29 inches Hg.
 - 4.2 Seal the vacuum and turn off the pump.
 - 4.3 Wait  00:02:00 , then release the vacuum.
- 5 Mark the plant with a colored sword.
- 6 Cover the plants with plastic tent overnight.
- 7 Take off plastic and put in tomato cage.
- 8 Pollinate for 2 weeks.
- 9 Collect the seeds.
- 10 Plant in flats using a salt shaker, about 15-20 seed capsules per flat.



- 11 When the seeds start to germinate, begin spraying with 1:1000 Basta.
- 12 Continue spraying with Basta every other day.
- 13 Transplant the healthy looking, resistant plants.