

JUL 21, 2023

Pythium Zoospore Production Soaking Solution

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Protocol Citation: Nimalka M Weerasuriya 2023. Pythium Zoospore Production Soaking Solution. protocols.io

https://protocols.io/view/pythi um-zoospore-productionsoaking-solution-cvxsw7ne

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Protocol status: In development We are still developing and optimizing this protocol

Created: Jun 20, 2023

Last Modified: Jul 21, 2023

PROTOCOL integer ID: 83666

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ABSTRACT

Creation of soaking solutions for *Pythium myriotylum* to be used for large-scale zoospore production.

MATERIALS

Soaking solutions:

- -1 L beaker
- -1 q CaCO3
- -Whatman #1 filter
- -1 N KOH pH adjustment
- -1 N HCl pH adjustment
- -Sucrose

Testing Zoospore Culture:

- -Haemocytometer
- -Microscope and slides
- -Counter
- -0.08% Methylene blue

Preparation

1 Have mature colonies of verified Pythium myriotylum growing on CMA or 1.5-2% WA. Colony maturity ~7 days, with visible oospores.

CITATION

Jones, B. L., & Woodard, K. E (1986). A Technique for Evaluating Peanut Germ Plasm for Resistance to Pythium myriotylum. Plant Disease, 70(11), 1038–1043.

LINK

https://doi.org/10.1094/PD-70-1038

Soaking Solutions

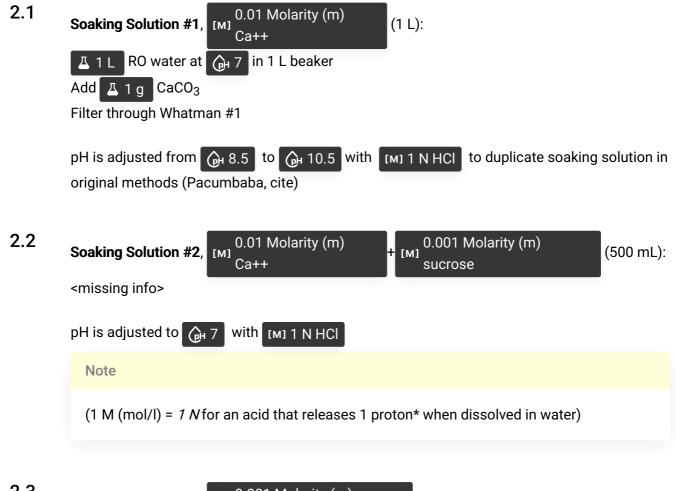
2 Make soaking solutions 1, 2 and 3:

CITATION

Nyochembeng, L. M., Pacumbaba, R. P., & Beyl, C. A (2002). Calcium Enhanced Zoospore Production of Pythium myriotylum in vitro. Journal of Phytopathology, 150(7), 396–398.

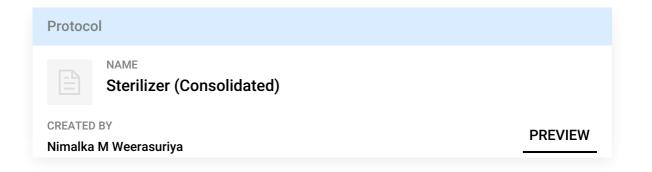
LINK

https://doi.org/10.1046/J.1439-0434.2002.00759.X





3 Autoclave for 20 minutes liquid cycle



Testing Zoospore Production

1d



1d



- Incubate under light at Room temperature for 24:00:00

 Check for abundant sporangia that will appear after immersion.
- 6 At 1.5 up to 4 h every 30 minutes:

