

VICiclo de
palestras

**Controle
Biológico de
Doenças:
Da Pesquisa ao
Campo**

Me. Endrio Webers

Atualmente doutorando
em fitopatologia da UFV

26 de
Junho

20h



Realização:



CAB
Centro Acadêmico
de Biotecnologia
Universidade Federal

INSTITUTO FEDERAL
Mato Grosso
Campus Avançado
Lucas do Rio Verde

Apoio:



Acesse meu site e
entre em contato:

<https://endriowebers.github.io/>

Referências:

- Legein, M., Smets, W., Vandenheuvel, D., Eilers, T., Muyshondt, B., Prinsen, E., ... & Lebeer, S. (2020). Modes of action of microbial biocontrol in the phyllosphere. *Frontiers in microbiology*, 11, 1619. <https://doi.org/10.3389/fmicb.2020.01619>
- Saraiva, R. M., Czymbmek, K. J., Borges, Á. V., Caires, N. P., & Maffia, L. A. (2015). Confocal microscopy study to understand *Clonostachys rosea* and *Botrytis cinerea* interactions in tomato plants. *Biocontrol science and technology*, 25(1), 56-71. <https://doi.org/10.1080/09583157.2014.948382>

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- Li, Q., Wu, L., Hao, J., Luo, L., Cao, Y., & Li, J. (2015). Biofumigation on post-harvest diseases of fruits using a new volatile-producing fungus of *Ceratocystis fimbriata*. *PLoS One*, 10(7), e0132009.
<https://doi.org/10.1371/journal.pone.0132009>
- Anith, K. N., Nysanth, N. S., & Natarajan, C. (2021). Novel and rapid agar plate methods for in vitro assessment of bacterial biocontrol isolates' antagonism against multiple fungal phytopathogens. *Letters in Applied Microbiology*, 73(2), 229-236. <https://doi.org/10.1111/lam.13495>

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<https://publications.ca.uky.edu/sites/publications.ca.uky.edu/files/ppa41.pdf>
- Nunes, P. S., Lacerda-Junior, G. V., Mascarin, G. M., Guimarães, R. A., Medeiros, F. H., Arthurs, S., & Bettoli, W. (2024). Microbial consortia of biological products: do they have a future?. *Biological Control*, 188, 105439.
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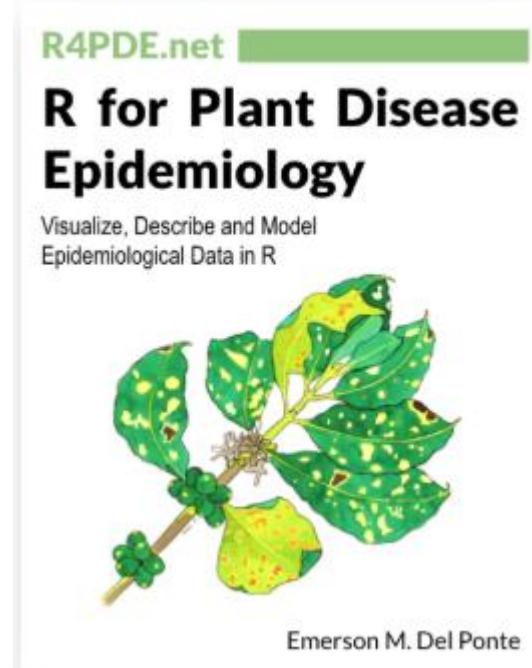
<https://doi.org/10.1016/j.cropro.2023.106317>

- Romero, D., De Vicente, A., Rakotoaly, R. H., Dufour, S. E., Veening, J. W., Arrebola, E., ... & Pérez-García, A. (2007). The iturin and fengycin families of lipopeptides are key factors in antagonism of *Bacillus subtilis* toward *Podosphaera fusca*. *Molecular Plant-Microbe Interactions*, 20(4), 430-440.

[10.1094/MPMI-20-4-0430](https://doi.org/10.1094/MPMI-20-4-0430)

Links uteis:

- Del Ponte, E. M. (2023). *R for Plant Disease Epidemiology (R4PDE)*. Author. <https://r4pde.net>



Links uteis

- <https://emersondelponte.netlify.app/apps>

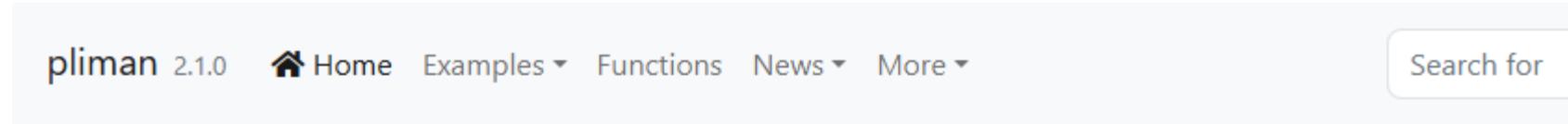
Trainer	SADBank

A training tool for increasing the accuracy of visual assessments of plant disease severity (percent diseased area).

A curated database of Standard Area Diagrams (SADs) for aiding visual assessments of disease severity.

Links uteis

- <https://tiagoolivoto.github.io/pliman/>



The screenshot shows the top navigation bar of the pliman website. It includes the package name "pliman 2.1.0", a "Home" button with a house icon, and dropdown menus for "Examples", "Functions", "News", and "More". To the right is a search bar with the placeholder "Search for".

pliman



The `pliman` (**p**lant **i**mage **a**nalysis) package is designed to analyze plant images, particularly for leaf and seed analysis. It offers a range of functionalities to assist with various tasks such as measuring disease severity, counting lesions, obtaining lesion shapes, counting objects in an image, extracting object characteristics, performing Fourier Analysis, obtaining RGB values, extracting object coordinates and outlines, isolating objects, and plotting object measurements.

`pliman` also provides useful functions for image transformation, binarization, segmentation, and resolution. Please visit the [Examples](#) page on the `pliman` website for detailed documentation of each function.