Package 'SeedVigorIndex'

May 31, 2024

Type Package

Title Seed Vigor Index

Version 0.1.0

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Description Seed vigor is defined as the sum total of those properties of the seed which determine the level of activity and performance of the seed or seed lot during germination and seedling emergence. Testing for vigor becomes more important for carryover seeds, especially if seeds were stored under unknown conditions or under unfavorable storage conditions. Seed vigor testing is also used as indicator of the storage potential of a seed lot and in ranking various seed lots with different qualities. The vigour index is calculated using the equation given by (Ling et al. 2014) <doi:10.1038/srep05859>.

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Encoding UTF-8

NeedsCompilation no

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SeedVigorIndex Seed Vigor Index

Description

Measurement of Seed Vigor Index using seedling length and germination percentage.

Usage

seed_VI(seedling_length, germ_percent)

Arguments

seedling_length

seedling length (in cm) germ_percent germination percentage

Value

Vigor Index (VI)

References

Ling L, Jiafeng J, Jiangang L, Minchong S, Xin H, Hanliang S, Yuanhua D (2014) Effects of cold plasma treatment on seed germination and seedling growth of soybean. Sci Rep 4:5859.\ Dutta, S. K., Layek, J., Akoijam, R. S., Boopathi, T., Vanlahmangaiha, Saha, S., & Prakash, N. (2019). Seaweed extract as natural priming agent for augmenting seed quality traits and yield in Capsicum frutescens L. Journal of applied phycology, 31, 3803-3813.

Examples

seedling_length <- 7.2
germ_percent <- 52
seed_VI(seedling_length, germ_percent)</pre>

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