**Discuss Board: Scarification**

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Scarification is the process whereby the germination of seeds is assisted by making the seed more physically accepting of moisture and nutrients which eventually drag the seed out of its dormant period. These methods focus primarily on breaching the outer thick covering or seed coat which protects the inner contents of the seed. This coat also prevents moisture and soil nutrients from entering the seed hence keeping it dormant. There can be different methods through which scarification of seeds is successfully carried out. The outer seed coat is disrupted by mechanical, chemical or thermal methods. (Baskin, 2014)

Out of the various methods that scarification can be carried out, a method which works well in a laboratory setting yet yields efficient results is the chemical method of disrupting the seed coat. (Dziurka, 2019) Chemicals with the ability to seep through or break the bonds holding together the seed coat are preferred. Strong acids or bases are therefore used for this purpose. Concentrated sulfuric acid is one of the most commonly used reagents for this purpose because of the ease of availability and efficiency. (Okonwu, 2017)

My experimental design would hence focus on inducing seed germination via treatment with various concentrations of sulfuric acid under a given amount of time. The independent variable in this experiment would therefore be concentration of sulfuric acid with the rate and/or degree of germination being the dependent variable. Another version of this experiment will be to keep the sulfuric acid concentration constant while controlling the time for which the seed is exposed to the acid. Here, time of exposure becomes the independent variable while degree of germination stays the dependent variable. The hypothesis of this experiment is that the more the concentration or time of exposure to acid, the more easily the seed coat will be disrupted and the quicker the germination will happen.

# References

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