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Environmental Factors Contribution to Diversification of Leaf Size Specie Growth

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ABSTRACT

Two species of plants from the same seed family produced diversification in different environmental factors. The research was used to study the differences of coniferous and broad-leaved plants from the same class. The included aesculus flava and alnus serrulate. The method using involved obtainance of there sequence from plant extracts from cellulose wall. The results showed the size of the leaf and the colour scheme varied in both species from the same plant in North Carolina. It was shown insect pollinators and wild life matter were the most contributors to broad leaved plants as for the aesculus flava. While in contradiction it was found the non-invertebrate factors such as wet soils of the habitat. Had the most effect on the colour produced in the membrane of the leaf of the plant. It is concluded from these findings with the appropriate human intervention precise changes can be made to the fertility of the plant. To yield more of broad-leaved plants supposedly to be more edible and to improve the habitat prevalence.

KEYWORDS

Broad leaf; Coniferous species; Diversification; Habitat; Wild life

INTRODUCTION

Broadleaved trees are typically known as hard cellulose planta. This is found in majority of plants. This is more valuable than coniferous plants for wild life and the habitat. There are different kinds of species of broadleaved with few from the same seed species as coniferous. Some examples are birch, hazelm lime, poplar, sycamore etc. Coniferous had lesser number of species than broadleaved and include larch, pine etc [1]. Broad leaved plants can grow as high as 15 cm to 20 cm in height whereas the conifers much higher to up to 40 cm to 60 cm. When in similar environmental conditions. Coniferous were usually planted as bare root species. While these kinds of plants cannot be replanted without loss of root network. Precise measures would need to made to ensure the prevalence of the species [2,3].

There are several techniques to measure sequence. These include invasive and non-invasive. In the initial instance extracts are taken and converted into pulp matter [4].

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These were measured with custom branched DNA set. In the second instance high resolution images were obtained and then the sequence extracted post-process. These are then used for understanding the effects of environmental conditions on the plant growth [5].

Figure 1 showed the invasive where extracts were taken directly from the broadleaved plant.



Figure 1: Aesculus flava native to the Appalachians.

Figure 2 showed the invasive method where plant extracts were taken from coniferous plant.



Figure 2: Alnus serrulate native to the wetland habitats.

MATERIALS AND METHODS

High resolution images were taken from the species. These were used for obtaining the sequences. The instrument used was developed by ThermoFisher scientific. This was a custom branched DNA set. To determine the prime flow, view RNA cell according to the web catalog in species other.

Singleplex Approach

In this experimental method the composition assumed was considered under the same population and environmental coniditions. Ribonucleide (RNA) was set and the scale of each pixel was 200 rxns.

View RNA Cell

This experimental approach was used to study the diversification with the assumption the plants were taken from different populations. This was important for study of the pollination and growth factors. To influence the development of more prevalent species. Particularly in environment with infertile soil and invertebrate species. RNA was used similar to singleplex approach but scale was 440ul. To measure more detail accurately possible.

Pulp Extracts Non-Invasive Approach

The extracts from high resolution images were obtained at the same densification. These were to replicate the experiment conditions with minimum discrepancies possible.

Figure 3 showed the pulp extracts for non-invasive used for the experimental conditions.



Figure 3: Pulp extracts used for non-invasive tests for Aesculus flava.



Figure 4: Pulp extracts used for non-invasive tests for Alnus serrulate.

RESULTS & DISCUSSION

Genius prime was used to prepare the sequences of each non-invasive sample [6-8].



Figure 6: RNA sequence extracted from sample 2 (Alnus serrulate).

Figure 5 showed a much higher densification of the broadleaved plant in relation to the coniferous plant. The number of nuclides in the initial plant was 88014 cells while in the second instance this was much smaller at 5109. The absolute pH value for the sample 1 was 780.7 and for sample 2 this was 39.68 [9].

These test from initial results showed in the presence of high wet conditions the concentration of the pH increased by a factor of 20. While the number cells were 20 times higher for broadleaved trees. Therefore, a mixture of wildlife and wet conditions were the most important factors. The insect pollination had minimum contribution to environmental conditions [10].

In the second phase of the experiment the branched DNA was measured according to the description in the methods and materials. The sequences were uploaded to the ThermoFisher scientific repository for studies. The RNA sequences were shown in the supplementary material [11].

CONCLUSION & RECOMMENDATIONS

To determine diversification. The PCR sequencing was determined from the database on thermosfisher scientific. This obtained the wild life in the environment. To determine the contribution to the species development.

The Gene ID for sample 1 was 88014. These were lesser diversity of 4 human species. The population size in this habitat was 1410.

The Gene ID for sample 2 was 5109. These were human species of 7 classes. This had a population size of 2492.

The diversity was opposite relation to the size of the colour scheme of the leaf. While the higher density had higher wet conditions. This produced a similar relation on the size of the leaf of the species [12].

Figure 5 and 6 showed the RNA sequences of each plant.

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REFERENCES

- 1. Igea J, Miller EF, Papadopulos AST, et al. (2017) Seed size and its rate of evolution correlate with species diversification across angiosperms. PLoS Biology 15(7): e2002792.
- Beltramino M, Ercoli MF, Debernardi JM, et al. (2018) Robust increase of leaf size by *Arabidopsis thaliana* GRF3-like transcription factors under different growth conditions. Scientific Reports 8: 13447.
- 3. Castiglione, Silvia, et al. (2017) Diversification rates and the evolution of species range size frequency distribution. Frontiers in Ecology and Evolution 5: 2017.
- 4. Chitwood DH, Headland LR, Filiault DL, et al. (2012) Native environment modulates leaf size and response to simulated foliar shade across wild tomato species. PLOS ONE Collection Marine Fisheries.
- 5. Derroire G, Powers JS, Hulshof CM, et al. (2018) Contrasting patterns of leaf trait variation among and within species during tropical dry forest succession in Costa Rica. Scientific Reports 8: 285.
- 6. Feng J, Cadotte MW, Jin G (2022) Size- and environment-driven seedling survival and growth are mediated by leaf functional traits. Proceedings of the Royal Society B: Biological Sciences.
- Kamiyama C, Katabuchi M, Sasaki T, et al. (2014) Leaf-trait responses to environmental gradients in moorland communities: Contribution of intraspecific variation, species replacement and functional group replacement. Ecological Research 29: 607-617.
- Li X, Li Y, Zhang Z, Li X (2015) Influences of environmental factors on leaf morphology of Chinese jujubes. PLoS One 10(5): e0127825.
- Testo WL, Sundue MA (2018) Are rates of species diversification and body size evolution coupled in the ferns? American Journal of Botany 105(3): 525-535.
- 10. Environmental factors affecting plant growth." OSU extension service, Oregon State University Extension Service.
- 11. Yang B, Cui M, Dai Z, et al (2022) Non-Additive effects of environmental factors on growth and physiology of invasive *Solidago canadensis* and a co-occurring native species (*Artemisia Argyi*). Plants 12(1): 128.
- 12. Tabusam J, Liu M, Luo L, et al. (2022) Physiological control and genetic basis of leaf curvature and heading in *Brassica rapa* L. Journal of Advanced Research.