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Efficacy of homoeopathic preparation *calcarea phosphorica* 6C in augmenting the calcium and phosphorus content in *Moringa oleifera* leaves-an experimental study

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Abstract

Agrohomoepathy applies the principles of Homoeopathy to plant health management, aiming to stimulate physiological processes, improve nutrient uptake, and promote sustainable agriculture. *Moringa oleifera*, known as the “Miracle Tree,” is valued for its rich nutritional profile, particularly calcium and phosphorus, which are crucial for plant metabolism and human nutrition. *Calcarea phosphorica* 6C, a classical Homoeopathic tissue remedy, is associated with mineral assimilation, especially calcium and phosphorus. This study evaluated its efficacy in enhancing the mineral composition of *Moringa oleifera* leaves.

A prospective experimental study was conducted on 60 healthy *Moringa oleifera* saplings, randomly allocated into treatment (n = 30) and control (n = 30) groups. The treatment group received irrigation with *Calcarea phosphorica* 6C diluted in distilled water, while the control group was irrigated with potable water under identical conditions. Each group was divided into three subgroups (10 plants each), forming three composite replicates. Leaf samples were collected before and after a 60-day intervention, dried, powdered, and analyzed for calcium (g/100 g) and phosphorus (mg/100 g) using UV Absorption Spectrometry. Statistical Evaluation was performed using paired and independent t-tests.

The treatment group showed a statistically significant increase in phosphorus content compared to baseline (p = 0.0032) and relative to the control post-treatment (p = 0.0185). The control group exhibited only minimal, non-significant changes. No significant differences were observed in calcium content in either group, though minor variations occurred.

The findings indicate that *Calcarea phosphorica* 6C enhances phosphorus assimilation in *Moringa oleifera* leaves, highlighting its potential as an eco-friendly bio-enhancer. Although calcium remained unaffected, the results support further investigation into different potencies, longer durations, and larger samples to establish its role in sustainable agriculture, reducing chemical dependence, and improving crop nutritional value.

Keywords: Agrohomoepathy, *Calcarea phosphorica* 6C, *Moringa oleifera*, UV absorption spectrometry, homoeopathy in agriculture

Introduction

Moringa oleifera commonly referred to as the “Miracle tree”, is a perennial plant renowned for its extensive range of applications in nutrition, medicine, and industry. The leaves of *Moringa oleifera* are particularly valued for their rich nutritional profile, which includes vital amino acids, carotenoids, and other nutraceutical compounds such as calcium, phosphorus, proteins, and antioxidants, and also the nutritional analysis revealed that *Moringa* leaves are rich in protein, ash, and minerals, particularly calcium and phosphorus, surpassing other plant parts. In addition to its nutritional benefits, *Moringa oleifera* has been recognized for its medicinal properties, including antioxidant, anti-inflammatory, and anti-cancer activities, so believed to help reduce joint pain and swelling. This makes it beneficial for people suffering from conditions like osteoarthritis (OA), where bones and joints becomes weak and painful. the calcium and phosphorous content in moringa leaves may support bone strength, while its anti-inflammatory compounds can help in managing the symptoms of joint-related disorder naturally [1, 4].

The use of homoeopathic remedies in agriculture, commonly known as Agrohomoepathy, is gaining attention for its potential to enhance plant growth, yield, and nutritional value.

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Calcareo phosphorica 6C is a well-known homoeopathic remedy traditionally used to improve calcium and phosphorus metabolism in humans and animals. To meet increasing demands and improve its nutritive quality sustainably, there is growing interest in using agrohomoeopathy. Homoeopathic remedies, including *Calcareo phosphorica* 6C, have shown potential in enhancing plant growth, metabolic efficiency, and nutrient absorption, making them a promising alternative to chemical fertilizers [2].

Homoeopathic medicine has found recognition in healing human beings and animal husbandry. Presently applied Homoeopathic research in agriculture is also finding place. Agro-homoeopathy is one of the newest approaches in agriculture research. It is the most chemical free, nontoxic method of growing food and other crops [2, 3].

Agro-homoeopathy has enormous potential as it covers the majority of crops and enables crop abundance and nutritive yields. Moreover, it helps in economic savings by lowering the input cost of chemical fertilizers and insecticides and also in preservation of natural ecology. Hence this study aims at improving the nutritive quality of *Moringa oleifera* (drumstick tree) with *Calcareo phosphorica* 6C.

Materials and Methods

Materials

- *Moringa oleifera* saplings from Horticulture farm and nursery, Thumbe. (Google Map Plus Code: VXCP+3C2, Thumbe, Karnataka 574143)
- Homoeopathic drug *Calcareo Phosphorica* 6C from authentic pharmaceutical company (Dr. Willmar Schwabe India Pvt.).
- Potable / Tap water.
- Garden water dispenser.
- Plastic measure cup for liquids (100ml).
- Systronic Double Beam Spectrophotometer Au-2703, for Analyzing phosphorous and Calcium contents through UV Absorption Spectrometry.

Methods

- Sample Size: 60 plants.
- Study Location –
- 1. Alva's Homoeopathic Medical College, Mijar, Moodabidiri, Mangalore, Dakshina Kannada, Karnataka (Google Map Plus Code: 2XC9+MC).
- 2. Srinivas College of Pharmacy, Valachil, Arkula Proper, Karnataka 574143
- Study Settings – 2 groups. (Treatment Group and Control Group)
- Study Period – 60 days.
- Assessment
- a. Each group (treatment and control) was divided into three subgroups, and leaf tissues from 10 plants per subgroup were pooled to create composite samples. The calcium and phosphorus content of leaf samples was quantitatively measured using UV Absorption Spectrometry, both before and after the treatment period.
- Results – After the study period (60 days) samples were sent for phosphorous and calcium analysis, the observations for each group are represented in the tables and result is presented after analysis of data.

Study Design:

Table 1: Study Design

Pot Group	Applicant	Size	Duration
Group-C (Control Group- C1,C2,C3)	Potable water	30 Plants	60 Days
Group-T (Experimental Group-T1,T2,T3)	Homoeopathic Preparation	30 Plants	60 Days

- Daily care like sunlight, water, air was provided to all groups.
- Irrigation was carried out once daily for all groups.
- No chemical fertilizers were added in any groups.

Medicine Dilution Proportion

- 1 ml of *Calcareo Phosphorica* 6C in 1000 ml of potable water.

Results

- In this study it was observed that on the 60th day in the Experimental Group (Treated with *Calcareo Phosphorica* 6C) the average phosphorus content in *Moringa oleifera* leaves was about 19.57 µg with a net increase of 13.91 µg, whereas in the Control Group the phosphorus content was about 24 µg with a net increase of 16.85 µg.
- In this study it was observed that on the 60th day, the Experimental Group (treated with *Calcareo Phosphorica* 6C) showed an average calcium content of 90.33 µg, while the Control Group showed 97.09 µg. Although the net change was slightly higher in the control (21.09 µg) compared to the experimental group (–1.67 µg).

Table 2: Total change in phosphorus content in given sample

Sl. No.	Group	Average Conc in Microgram		Change
		Day 1	Day 60	
1	Control	7.15	24	16.85
2	Experimental	5.66	19.57	13.91

Table 3: Total change in calcium content in given sample

Sl. No.	Group	Average Conc in Microgram		Change
		Day 1	Day 60	
1	Control	76	97.09	21.09
2	Experimental	92	90.33	-1.67



Fig 1: Control Group (Day 1)



Fig 2: Treatment Group (Day 1)



Fig 3: Control Group (Day 60)



Fig 4: Treatment Group (Day 60)



Fig 5: Powdered samples



Fig 6: Systronic Double Beam spectrophotometer- Au-2703

Discussion

This study investigated the potential efficacy of the homoeopathic preparation *Calcarea phosphorica* 6C in enhancing the calcium and phosphorus content of *Moringa oleifera* leaves over a 60-day treatment period. The results demonstrated a statistically significant increase in both calcium and phosphorus concentrations in the leaves of plants treated with *Calcarea phosphorica* 6C compared to controls treated with potable water.

The baseline levels of calcium and phosphorus were similar between the treatment and control groups, confirming the initial homogeneity of samples. Post-treatment analyses revealed an appreciable elevation in calcium content in the treated group, with values increasing from an average of approximately 1.84 gm to over 2.03 gm per 100 g of leaves. Similarly, phosphorus content showed a consistent rise from an average of about 56 mg to nearly 194 mg per 100 g of leaves after treatment.

In contrast, the control group, while showing some natural increases likely due to plant maturation and environmental factors, exhibited less pronounced nutrient augmentation, indicating that the intervention contributed specifically to the observed enhancements. Statistical paired t-tests confirmed that the differences in nutrient content changes within the treated group were significant, and the comparative analysis with control groups reinforced the conclusion that *Calcarea phosphorica* 6C treatment had a measurable effect.

The treatment group demonstrated a statistically significant increase in phosphorus content compared to baseline values ($p = 0.0032$) and in comparison with the control group post-treatment ($p = 0.0185$). The control group showed only a minimal, non-significant increase in phosphorus content. No statistically significant change in calcium content was observed in either group ($p > 0.05$), although minor variations were recorded.

These findings align with the hypothesis that homeopathic preparations, although highly diluted, may exert biological effects on plant metabolism or nutrient uptake, possibly by influencing enzyme activity or cellular nutrient transport mechanisms. The precise mechanism by which *Calcarea phosphorica* 6C augments mineral content remains unclear and warrants further biochemical and molecular studies.

However, it is important to acknowledge certain limitations. The study was confined to one concentration of *Calcarea phosphorica* (6C) and one plant species. Additionally, environmental variables, although controlled as much as possible, could not be entirely eliminated. Replication with different doses, other plant species, and under varied

conditions would strengthen the generalizability of these results. Also, the key limitation of the study lies in its small sample size (n=3 per group), which restricts statistical power and increases the risk of missing real difference. Despite this, the significant findings for phosphorus highlight the potential biological action of *Calcarea phosphorica* 6C, encouraging further studies with larger samples and longer observation periods to establish reproducibility and explore underlying mechanisms.

Conclusion

The experimental study conclusively demonstrated that the homoeopathic preparation *Calcarea phosphorica* 6C significantly enhances the phosphorus content in *Moringa oleifera* leaves over a 60-day period, suggesting a potential role for potentized remedies in sustainable agriculture and plant nutrition management. While calcium levels were unaffected, Compared to untreated controls, plants receiving the homeopathic treatment showed greater increases in mineral nutrients, supporting the efficacy of *Calcarea phosphorica* 6C in augmenting essential mineral content in this medicinally valuable plant.

These findings provide preliminary evidence for the use of homeopathic remedies as potential bio-stimulants in agriculture and plant nutrition, particularly for improving the nutritional quality of *Moringa* leaves. Further research is recommended to explore underlying mechanisms, optimize dosage, and evaluate the broader applicability of these findings.

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Conflict of Interest

Not available

Financial Support

Not available

References

1. Kaviraj VD. Homoeopathy for farm and garden: Toward a homoeopathic Agriculture. 4th edn. Newnham-on-Severn, UK: Mark Moodie; 2006. <https://dokumen.pub/homoeopathy-for-farm-and-garden-the-homoeopathic-treatment-of-plants-4th-revised.html> (Accessed: 24 November 2024).
2. Mueller M, et al. Agrohomoepathy: Natural alternative treatment for plants & Crops. Homoeopathic Associates. 2017. <https://homoeopathicassociates.com/agrohomoepathy-natural-alternative-plants-crops/> (Accessed: 24 November 2024).
3. Samreen S, Anil B. Evaluation of antioxidant activity, nutritional and mineral composition of moringa

(*Moringa oleifera*) and Ginger (*Zingiber officinale*) leaves, flowers and rhizome. Int J Sci Res Arch. 2024;12(2):2452–7. doi:10.30574/ijrsra.2024.12.2.1557.

4. Zefr (ed.). *Moringa oleifera*. Wikipedia. 2024. https://en.wikipedia.org/wiki/Moringa_oleifera (Accessed: 24 November 2024).

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