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Unveiling the Influence of Spiritual Blessing Energy Treatment on the Cultivation, Growth and Production of Bottle Gourd (*Lagenaria siceraria L.*)

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ABSTRACT

As agricultural science seeks sustainable and holistic methods to enhance crop productivity, unconventional variables such as subtle energy fields have gained academic interest. This study investigates the impact of spiritual energy (an intentional, non-physical intervention) on the growth, physiological development, and yield of the bottle gourd (Lagenaria siceraria L.). The experiment was performed dividing into two groups: control group (subjected to standard agronomic practices without energetic intervention) and a treatment group (exposed to remote spiritual blessing energy session by a distinguished experienced practitioner). The spiritual blessing energy was transferred through distance mode via online web-conferencing platform. The findings indicate that the treatment group exhibited improvement of vegetative features such as plant vigor, plant growth habit, stem pubescence, leaf size., colour of leaf blade, fruit skin, and seed compared to the control. Additionally, plant vine length and leaf width were significantly increased by 55.65% ($p = 0.005$) and 44.67% ($p \leq 0.001$) in the spiritual blessing energy treated bottle gourd group (BTBOGG) compared to the control (CONBOGG). Seed width and fruit yield per hectare were significantly increased by 45.28% ($p \leq 0.001$) and 47.32%, respectively, in the BTBOGG than CONBOGG. In conclusion, the study demonstrates that the application of remote spiritual blessing energy treatment, delivered via a non-physical, intentional intervention, resulted in a statistically significant enhancement of both the vegetative, reproductive, and yield parameters of the Bottle Gourd (Lagenaria siceraria L.).

Keywords

Bottle gourd, Spiritual energy blessing, Plant growth promotion, Yield, Prayer, Phenology, Morphology.

Abbreviations

NPK: Nitrogen phosphorus potassium, SBET: Spiritual blessing energy treatment, CONBOGG: Control bottle gourd group, BTBOGG: Biofield energy-treated bottle gourd group, SSP: Single super phosphate, MOP: Muriate of potash, DAS: Days after sowing.

Introduction

Lagenaria siceraria (Molina) Standl., commonly known as bottle gourd, is one of the most versatile and essential cucurbitaceous crops globally, particularly in tropical and subtropical regions. However, its cultivation is often hampered by low seed germination rates and susceptibility to various biotic stressors. Beyond its role as a nutrient-dense food source rich in vitamins, minerals, and dietary fibers, it holds significant industrial value for its use in traditional medicine and domestic utensils [1]. However, contemporary agriculture faces a dual crisis: the escalating demand for food security and the ecological degradation caused by the over-reliance on chemical fertilizers and pesticides. Bottle gourd is widely used as a rootstock for watermelon to prevent soil-borne diseases [2]. Its therapeutic potential, particularly regarding antioxidants and cardioprotective effects [3]. Bottle gourd is used as a vegetable for good health and management of mental health disorders. It contains high amount of choline and appropriate metabolic precursors for brain functioning. Therefore, the bottle gourd has good therapeutic importance and is recommended to be consumed in daily diet for nutrition [4,5]. It also extensively used as cardiotonic, cardioprotective, aphrodisiac, diuretic, and antidote to certain poisons [6].

The global agricultural sector faces an escalating crisis driven by climate instability, dwindling soil fertility, and the over-reliance on synthetic fertilizers, which have led to significant ecological degradation. To ensure food security for a growing population, researchers are increasingly exploring non-conventional, sustainable interventions to enhance crop productivity and resilience. Among these emerging frontiers is the study of biofield energy treatments, a subset of integrative health and biophysical research that investigates the impact of subtle energy fields on biological systems [7]. Preliminary studies suggest that directed biofield energy a form of subtle electromagnetic or "subtle energy" influence, can alter the physiological and genetic characteristics of living organisms. This study aims to unveil the specific influence of Biofield Energy Treatment on the cultivation dynamics and production of *Lagenaria siceraria L.*, focusing on germination rates, vegetative growth, and overall yield. By bridging the gap between biophysical energy applications and botanical science, this research seeks to provide a data-driven framework for integrating subtle energy modalities into modern sustainable agriculture.

Materials and Methods

Study site, test items, and plot design

This study was conducted on agricultural land in Bhandarwadi, Sindhudurg, Maharashtra (15°37’–16°40’ N, 73°19’–74°13’ E; altitude 26 m) from February to June 2025. The semi-arid climate featured peak temperatures of 40℃ (April–May) and winter lows of 8–25℃, with unpredictable rainfall causing periodic moisture stress. Seeds of *Lagenaria siceraria L.* (Vinayak hybrid; 95% genetic purity; Lot: 19906636) were sourced from Namdeo Umaji Agritech. The experiment utilized a Randomized Complete Block Design (RCBD) with three replications to compare two groups: a control (CONBOGG) and a biofield energy-treated group (BTBOGG), where both seeds and soil received spiritual blessings. Six plots (11.25 m^2 each) were established within an 80 m^2 area, maintaining 0.5 m spacing and buffers. Uniform agronomic practices, including NPK application at 50:100:50 kg/ha were applied across all plots. Growth and yield parameters were subsequently evaluated to determine treatment efficacy.

Spiritual energy treatment (blessing/prayer) strategy

The experimental units (bottle gourd seeds and farming land) were bifurcated into two distinct cohorts: a control group (CONBOGG), which remained sequestered from any external energetic interventions, and a treatment group (BTBOGG). The treatment group was subjected to a Remote Biofield Energy Intervention (RBEI), facilitated *via* a real-time digital telecommunications interface originating from Florida, USA. The intervention was administered by Ms. Alice Branton, with over 12 years expertise in subtle energy modalities. This protocol involved the directional transmission of an intentional biofield toward the primary germplasm (seeds) and the growth substrate (soil) for a standardized duration of four minutes. To ensure the integrity of the results and minimize confounding variables, ambient environmental conditions within the cultivation sector were rigorously monitored and maintained at a controlled thermal range of 28 ± 2°C with a regulated atmospheric moisture content (relative humidity) of 65 ± 5%. This stabilized microclimate served to isolate the energetic treatment as the primary independent variable influencing the subsequent physiological and yield-based outcomes.

Soil properties and farming

The experimental site featured sandy loam soil, characterized by high permeability and inherently low nutrient status. Baseline soil properties were established *via* five-point composite sampling (~30 cm depth) per plot. Samples were processed by air-drying and sieving (2 mm), then archived at 4°C. Physical texture was verified using the hand feel method, while chemical analysis employed a 1:2 (w/v) soil-water suspension and a digital pH meter. Following direct sowing, moisture was regulated *via* manual irrigation for 9 days, transitioning thereafter to a drip system (3 L h^{-1} self-compensating emitters at 0.5 m intervals). Basal fertilization followed a 50:100:50 kg ha^{-1} (N:P:K) regime; the full P (SSP) and K (MOP) requirements, plus 50% of the N (urea), were soil-incorporated pre-sowing. The remaining N was top-dressed at 21 days after sowing (DAS). To standardize pest pressure, Hamla 550 (2 mL L^{-1}) was applied at 21 and 49 DAS across all plots. Final assessments of vegetative and reproductive traits were conducted at 80 DAS using five randomly selected plants per replicate.

Vegetative growth and yield parameters

Morphological characterization integrated qualitative and quantitative methodologies. Qualitative traits focused on vegetative and reproductive architecture, including plant vigor, growth habit, stem ontogeny, and foliar attributes (pubescence, lobing, and blade coloration). Fruit and seed morphology were evaluated based on skin color, fruit shape, seed pigmentation, and seed content. Quantitative data comprised vegetative metrics such as vine length, primary branch count, nodal frequency, internode length, and stem diameter, and foliar dimensions. Reproductive phenology was marked by days to 50% flowering. Post-harvest analysis at physiological maturity involved measuring fruit mass, dimensions (length/diameter), and seed metrics *via* digital scales and calipers. Total yield, initially recorded as plot-weight (kg), was standardized to $t\ ha^{-1}$ for comparative analysis.

Statistics

Quantitative data were represented as the mean ± standard error of the mean (SEM) to reflect the precision of the sample distribution. To evaluate the null hypothesis between two independent experimental cohorts, a two-tailed Student's *t*-test was employed. All datasets were subjected to normality and variance equality testing within the SigmaPlot software environment (version 14.0, Systat Software, Inc., USA). In instances where data met these parametric assumptions, the *t*-statistic was calculated to determine the probability of observed differences. The threshold for statistical significance was predefined at a p-value < 0.05, and all resulting figures were generated and formatted using the same software suite to ensure consistency in data visualization.

Results

Analysis of soil properties

The experimental soil, classified as sandy loam, exhibited inherent infertility marked by elevated bulk density alongside suboptimal levels of organic matter, total nitrogen, and exchangeable cations (Ca^{2+}, Mg^{2+}, and Na^{+}). Initially, the control soil (CONBOGG) was strongly acidic (pH 5.01), a state known to suppress cation exchange capacity and hinder nutrient bioavailability. Following the BET treatment, the pH increased to 5.86, representing a transition to moderately acidic conditions (data not shown), which suggests an improvement in the chemical environment for plant growth.

Morphology of bottle gourd

Vegetative growth-related to morphological characteristics of bottle gourd were recorded time to time. The growth of bottle gourd from initial to terminal such as the phases of germination, seedling, plant vegetative growth, flowering, fruiting, and harvesting are shown in (Figure 1).

Effects of spiritual blessing (prayers) on qualitative vegetative parameters of bottle gourd is shown in (Table 1). Early plant vigour was rated as very good in the treatment group (BTBOGG), compared to good in the control group (CONBOGG). Plant growth habit in terms of vine length was long in BTBOGG, while CONBOGG exhibited medium vine length. Stem pubescence was dense in BTBOGG and medium in CONBOGG. Leaf size was large in BTBOGG and medium in CONBOGG. Leaf pubescence was very soft in BTBOGG and soft in CONBOGG. The upper surface of the leaf blade was dark green in BTBOGG and medium green in CONBOGG. Fruit skin colour was dark green in BTBOGG and medium green in CONBOGG. Seed colour was brown in BTBOGG and light brown in CONBOGG. The number of seeds per fruit was higher in BTBOGG, whereas CONBOGG had a medium number of seeds. Other parameters followed a similar pattern in both groups (Table 1).

Table 1: Impact of biofield energy blessing on vegetative quality traits of bottle gourd at 80 days post-sowing.

Vegetative trait	Control group (CONBOGG)	Treated group (BTBOGG)
Early plant vigour	Good	Very good
Plant growth habit	Medium vine (2.5-4 m)	Long vine (>4 m)
Stem shape	Angular	Angular
Stem pubescence	Medium	Dense
Tendril	Present	Present
Tendril type	Coiled	Coiled
Tendril branching	Branched	Branched
Leaf margin	Entire	Entire
Leaf size	Medium	Large
Leaf blade shape	Cordate	Cordate
Leaf pubescence	Soft	Very Soft
Leaf blade colour (upper side)	Medium green	Dark green
Number of lobes in leaf blade	3 lobes	3 lobes
Sex type	Monoecious	Monoecious
Flower colour	White	White
Fruit skin colour	Medium green	Dark green
Fruit longitudinal shape	Cylindrical	Cylindrical
Fruit shape at blossom end	Semi blunt	Semi blunt
Fruit pubescence	Present	Present
Fruit taste	Sweet	Sweet
Seed colour (at the mature harvest stage)	Light brown	Brown
Seediness (number of seeds/ fruit)	Medium (200-300)	Higher (>300)

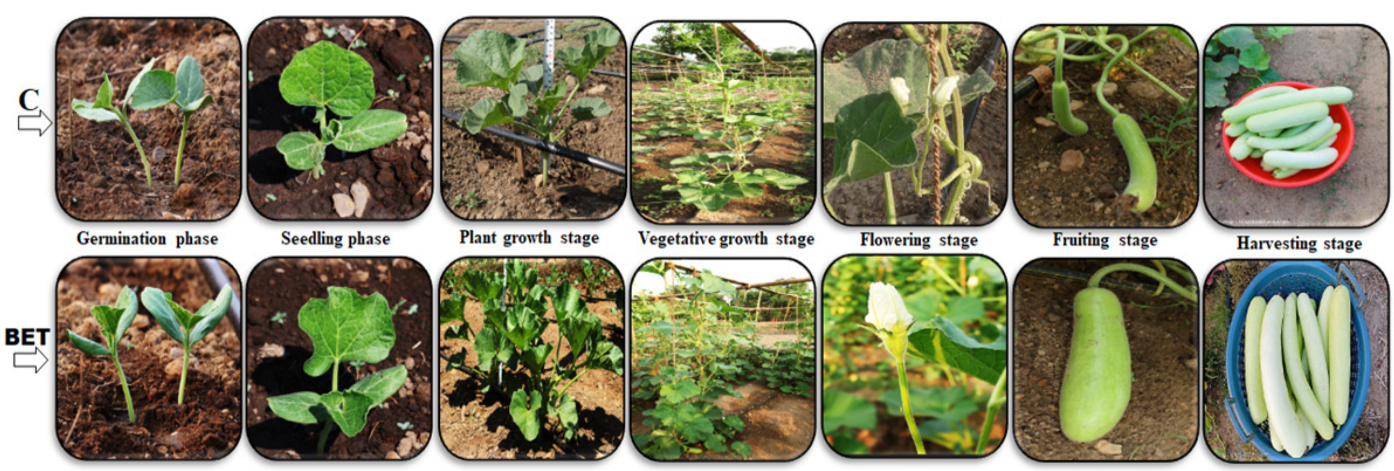

Figure 1: The images depict the progression of vegetative growth characteristics in bottle gourd across various developmental stages. C: Control group; BET: Spiritual Blessing/biofield energy treatment group.

Phenology and yield traits

BTBOGG demonstrated a notable 14.91% ($p \leq 0.001$) improvement in germination rate relative to CONBOGG. At the time of harvest, vine length in BTBOGG exceeded that of CONBOGG by 55.65% ($p = 0.005$). The counts of primary branches, nodes per vine and internodal lengths in BTBOGG surpassed those in CONBOGG by 34.53%, 30.99% and 36.92%, respectively, all showing high statistical significance ($p \leq 0.001$). In BTBOGG, the number of leaves per plant, leaf length, and leaf width were higher by 17.99% ($p = 0.004$), 26.53% ($p = 0.002$), and 44.67% ($p \leq 0.001$), respectively. The timing of first male and female flower appearance also differed significantly ($p \leq 0.001$ for both) between BTBOGG and CONBOGG. The production of male and female flowers in BTBOGG increased by 29.44% ($p = 0.031$) and 36.17% ($p = 0.044$), respectively, compared to the control. The spiritual blessing treatment group reached 50% flowering 9.26% faster than the control. In BTBOGG, fruit weight, length, and width were greater than those of CONBOGG by 29.37% ($p = 0.039$), 17.99% ($p = 0.030$), and 14.24% ($p = 0.021$), respectively. Increases in BTBOGG seed length, seed width, seed count per fruit, and 100-seed weight were observed at 32.23%, 45.28%, 32.68%, and 19.03%, respectively ($p \leq 0.001$ for all). The number of fruits per vine in BTBOGG was 20% higher ($p \leq 0.001$) than in CONBOGG. Overall, fruit yield per hectare was 47.32% higher in BTBOGG compared to CONBOGG (Table 2).

Discussion

The observed enhancement in the qualitative vegetative parameters of bottle gourd (*Lagenaria siceraria*) following spiritual blessing suggests a potential intersection between non-physical stressors (remote blessing energy) and plant biological response. The "very good" early plant vigour and dense stem pubescence noted in the BTBOGG group align with the findings [8], that subtle energy or intentionality can influence cellular metabolic activities and stress resilience in crops. The transition from "medium" to "long" vine length and "medium" to "large" leaf size in the treatment group indicates an acceleration in vegetative morphogenesis (Table 1). Such morphological shifts are often regulated by hormonal signaling pathways, particularly gibberellins and auxins, which may be sensitive to exogenous energetic influences as hypothesized in biofield research [9]. The intensification of pigmentation, specifically the dark green leaf blades and fruit skin in BTBOGG, points toward an increase in chlorophyll content or photosynthetic efficiency (Table 1). Enhanced chlorophyll density is a primary indicator of plant health and nutrient uptake, suggesting that spiritual intervention might play a role in optimizing the plant's

Table 2: Effect of Spiritual Energy (Prayer) treatment on phenological development and yield in bottle gourd.

Vegetative trait	Control group (CONBOGG)	Treated group (BTBOGG)	P value
Days to germination	6-8	6-7	-
Germination percentage	84.24 ± 0.38	96.80 ± 0.16	$p \leq 0.001$
Plant height/vine length (m)	3.54 ± 0.29	5.51 ± 0.43	$p = 0.005$
Number of primary branches/vine	6.14 ± 0.29	8.26 ± 0.11	$p \leq 0.001$
Number of nodes/vine	84.31 ± 3.14	110.44 ± 3.36	$p \leq 0.001$
Internode length (cm)	12.54 ± 0.57	17.17 ± 0.46	$p \leq 0.001$
Stem diameter (cm)	1.57 ± 0.05	1.68 ± 0.07	$p = 0.237$
Number of leaves per plant	178.31 ± 5.34	210.38 ± 5.79	$p = 0.004$
Leaf length (cm)	15.34 ± 0.27	19.41 ± 0.86	$p = 0.002$
Leaf width (cm)	11.64 ± 0.21	16.84 ± 0.35	$p \leq 0.001$
Days to first male (staminate) flower appearance	37.61 ± 0.51	33.86 ± 0.33	$p \leq 0.001$
Days to first female (pistillate) flower appearance	41.54 ± 0.27	37.21 ± 0.55	$p \leq 0.001$
Days to 50% flowering	55.28 ± 1.17	50.16 ± 1.47	$p = 0.026$
Number of male flowers	55.98 ± 5.01	72.46 ± 3.84	$p = 0.031$
Number of female flowers	22.31 ± 3.08	30.38 ± 1.37	$p = 0.044$
Days to first harvest	74.38 ± 1.42	68.59 ± 1.37	$p = 0.019$
Peduncle length (cm)	11.05 ± 0.37	10.77 ± 0.52	$p = 0.672$
Fruit weight (kg)	1.43 ± 0.13	1.85 ± 0.11	$p = 0.039$
Crop duration (days)	119.67 ± 4.03	118.86 ± 2.37	$p = 0.867$
Fruit length (cm)	30.24 ± 1.54	35.68 ± 1.37	$p = 0.030$
Fruit width (cm)	12.57 ± 0.57	14.36 ± 0.26	$p = 0.021$
100-seed weight (gm)	14.19 ± 0.07	16.89 ± 0.05	$p \leq 0.001$
Seed length (cm)	1.21 ± 0.02	1.60 ± 0.01	$p \leq 0.001$
Seed width (cm)	0.53 ± 0.01	0.77 ± 0.01	$p \leq 0.001$
Seed count/fruit	266.58 ± 4.13	353.71 ± 4.82	$p \leq 0.001$
Number of fruits per plant	6.10 ± 0.29	7.32 ± 0.11	$p = 0.004$
Fruit yield (kg)	41.59	61.26	-
Fruit yield/sq. m plot (kg/sq. m)	1.23	1.82	-
Fruit yield/hectare (ton/ha)	12.32	18.15	-

Data represented as mean ± SEM (n = 5); Statistical analysis was performed between two independent groups using Student's *t*-test internal physiological state [10].

Furthermore, the shift from light brown to brown seed color and the higher seed count per fruit in the treated group (BTBOGG) suggest that these effects extend beyond vegetative growth into reproductive success and seed maturation (Table 1). This correlation between intentionality and improved yield components has been documented in studies exploring the impact of focused human consciousness on biological systems [11]. The results of this study demonstrate that the application of spiritual blessing energy led to a profound enhancement in the phenotypic and reproductive characteristics of *Lagenaria siceraria* L. The significant increases in vine length and leaf width suggest that the treatment group (BTBOGG) achieved higher photosynthetic efficiency and biomass accumulation compared to the control group (CONBOGG) [12]. The improvement in seed width and total yield suggests that the "subtle energy" intervention might influence the plant at a cellular or molecular level, potentially modulating the endogenous hormonal balance (such as auxins and gibberellins) responsible for cell division and fruit set. While the transfer of energy occurred *via* an online platform, these results align with growing research into biofield therapies and intentionality in biological systems. Similar anomalies have been documented where non-physical variables influenced the physical properties of water or the germination rates of seeds, suggesting a "non-local" interaction between the practitioner's intent and the plant's physiological state [13,14].

Conclusion

The significant improvements in growth vigour, foliar development, and reproductive output (seed count) in the treatment group (BTBOGG) suggest that spiritual blessing may act as a positive exogenous influence on the physiological and morphological expressions of bottle gourd (*Lagenaria siceraria*). Consequently, this study provides preliminary evidence that non-physical interventions may contribute to superior plant health and yield, warranting further investigation into the molecular mechanisms of biofield interactions in agriculture.

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Conflict of Interests

Author AB was employed by Trivedi Global, Inc. TBG, NRP, and VDK were employed by Shree Angarsiddha Shikshan Prasarak Mandal's College of Agriculture, Sangulwadi, Mohitewadi, Maharashtra, India. Authors SM and SJ were employed by Trivedi Science Research Laboratory Pvt. Ltd. The authors do not have any commercial interests on the objectivity of the research.

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