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Exploring the Role of Spiritual Blessing Energy Treatment in Enhancing Growth and Yield of Bottle Gourd (*Lagenaria siceraria* L.)

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Abstract

A field experiment was conducted during the 2024–2025 growing season at Bhandarwadi, Maharashtra, India, to evaluate the effects of spiritual (blessing) energy treatment (S/BET; Trivedi Effect®) applied to seeds and experimental soil on the vegetative growth and yield performance of bottle gourd (*Lagenaria siceraria* L.). The experiment was arranged in a randomized block design (RBD) with three replications. Seeds were assigned to two groups: an untreated control (CONBOGG) and a spiritual/biofield energy-treated group (BTBOGG). Plants receiving SET exhibited statistically significant improvements in several growth and yield-related traits relative to the control, including overall plant vigor, growth habit, stem pubescence, leaf size and pubescence, leaf blade coloration, fruit skin color, seed color, and seediness. These results indicate a positive influence of S/BET on the morphological and reproductive attributes of bottle gourd under field conditions. Phenological traits, including vine length, number of branches, nodes per vine, internodal length, leaf width, number of female flowers, fruit weight, fruit width, seed length, seed width, and seed number per fruit were significantly enhanced in the BTBOGG group compared with the CONBOGG group, with increases of 59.50% ($p = 0.001$), 67.70% ($p \leq 0.001$), 40.15% ($p \leq 0.001$), 50.12% ($p \leq 0.001$), 40.37% ($p \leq 0.001$), 57.92% ($p = 0.008$), 56.00% ($p = 0.009$), 57.14% ($p \leq 0.001$), 53.27% ($p \leq 0.001$), 54.90% ($p \leq 0.001$), and 40.01% ($p \leq 0.001$), respectively. In addition, total yield ($t\ ha^{-1}$) increased by 61.87% in the BTBOGG group relative to the control. Collectively, these findings demonstrate that SET-Trivedi Effect® treatment substantially improved plant morphology, reproductive performance, and yield in bottle gourd, providing robust preliminary evidence for its potential application in enhancing crop productivity and quality.

Keywords: *Lagenaria siceraria*, spiritual blessing, prayer, morphology, phenology, bottle gourd, yield

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1. INTRODUCTION

Bottle gourd (*Lagenaria siceraria* (Molina) Standl.) is a self-fertile vegetable crop extensively cultivated in rural communities across India, China, South Africa, and

Zimbabwe. This crop holds considerable commercial significance due to its economic value. It serves multiple purposes, including use as food, medicine, decoration,



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household utensils and musical instruments (Flores-Chacón et al. 2024). The young leaves, shoots, seeds, and fresh tendrils are utilized in cooking and for therapeutic applications (Loukou et al. 2007). Mature, dried bottle gourd fruits are employed as containers, cooking utensils, musical instruments, and fishing net holders (Decker-Walters et al. 2004). Additionally, bottle gourd is used medicinally to treat various conditions such as liver diseases, flatulence, hypertension, diabetes mellitus, and as a diuretic (Ghule et al. 2007). The fruits are also recognized as potential sources of antioxidant and anticancer compounds (Sakthivel et al. 2022). Morphological characteristics are valuable for distinguishing genotypic features in vegetables, as these traits are highly heritable and stable. The yield of bottle gourd fruits is largely influenced by desirable morphological traits, which serve as phenotypic markers (Rambabu et al. 2017). Farmers have several strategies to enhance productivity and profitability. Among these, cost-effective approaches such as complementary and alternative medicine (CAM) treatments, specifically spiritual (blessing) energy treatment (S/BET) or the Trivedi Effect®, have been identified as promising methods for maximizing agricultural returns. The Trivedi Effect® has already demonstrated positive outcomes in bottle gourd cultivation (Trivedi et al. 2015). Therefore, the objective of this study was to evaluate the vegetative growth and yield of bottle gourd fruits following the application of blessings to both seeds and farmland. The findings from this research are expected to contribute valuable insights to the field of agriculture.

2. MATERIALS AND METHODS

2.1. Study site details

The experiment was conducted on farmland in Bhandarwadi, Sindhudurg, Maharashtra, India, from February to June 2025. The site is situated between 15° 37' and 16° 40' north latitude and 73° 19' to 74° 13' east longitude, at an elevation of 26 meters above sea level. The region is characterized by hot summers and cool winters. Temperatures reach up to 40°C in April and May, and decrease to between 8°C and 25°C from December to February. Rainfall is highly variable, frequently resulting in dry spells and reduced soil moisture during crop growth.

2.2. Seed details

Bottle gourd (*Lagenaria siceraria* L.) seeds (label number: A4-63795, lot number 19906636, genetic purity: 95%) of vinayak hybrid variety were obtained from Namdeo Umaji Agritech (India) Pvt. Ltd. The seeds were split into two groups. One group served as the control and was left untreated. The other group was labeled as treated and received Blessings/BET/prayers. Both groups were then planted in the chosen farmland to analyze their growth, appearance, and yield. The same cultivation methods including irrigation, fertilization, and pesticide use were applied in both the groups.

2.3. Plot design

A Randomized Complete Block Design (RCBD) was employed, comprising two groups: an unblest/untreated control group (CONBOGG) and a spiritual blessing treatment group (BTBOGG). The CONBOGG group received no blessing treatment for either seeds or land, whereas the BTBOGG group involved both seeds and land treated with biofield (blessing) energy treatment. The experiment included three replications. Each block contained two plot units: control (CON) and blessing (biofield) energy-treated (BT). Plots were randomly assigned within each block according to the experimental design. Six plots were established, each measuring 4.5 m × 2.5 m. Spacing between plants was maintained at 0.5 m × 0.5 m, with a half-meter distance between replications and 50 cm between plots. The total experimental site area was 80.0 m², and each plot covered 11.25 m². The farming area was prepared by cleaning, and standard fertilizer levels (50, 100, and 50 kg NPK ha⁻¹) were applied to each plot and incorporated into the soil prior to seed planting.

2.4. Spiritual energy treatment (blessing/prayer) strategy

The control group of bottle gourd seeds and plots, called CONBOGG, received no treatment. The treated group, called BTBOGG, received a spiritual blessing energy treatment, also known as prayer, or biofield energy treatment (BET) from Mr. Mahendra Kumar Trivedi. This was done in person for about 4 minutes by a spiritual biofield energy healing practitioner with over 15



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years of experience. The practitioner blessed to the seeds and land without touching them. The blessing involved the healer using the laying on of hands and prayers from about 1.5 feet away, at a temperature of $28 \pm 2^\circ\text{C}$ and relative humidity of $65 \pm 5\%$. During this process, the healer aimed to channel divine energy from the Universe to the treated seeds and land.

2.5. Soil properties

The experimental soil was sandy loam with low inherent fertility and good drainage. Before treatment application, composite topsoil samples (from 30 cm depth) were collected from each plot using a five-point sampling scheme. Samples were air-dried, sieved (<2 mm), and stored at 4°C prior to analysis. Soil texture was determined by the hand-feel method (Richer-de-Forges et al. 2022), and soil pH was measured in a 1:2 (w/v) soil-water suspension using a calibrated digital pH meter.

2.6. Seed plantation and management

Seeds were directly sown in the field. During the initial 9 days after sowing (DAS), plots were maintained at field moisture through manual irrigation. Subsequently, irrigation was provided *via* a drip system equipped with self-compensating emitters spaced at 0.5 m intervals, delivering 3 L h^{-1} per emitter. All plots received a basal fertilizer application at a rate of $50:100:50\text{ kg ha}^{-1}$ N:P:K supplied as urea, single superphosphate (SSP), and muriate of potash (MOP), respectively. Entire doses of SSP and MOP and 50% of the urea were incorporated into the soil before sowing, while the remaining urea was top-dressed at 21 DAS. Insect control was achieved using Hamla 550 (Gharda Chemicals Ltd., India) applied at 2 mL L^{-1} on 21 and 49 DAS across all treatments. Vegetative growth and yield parameters were assessed at 80 DAS by randomly sampling five plants per plot.

2.7. Plant growth parameters

A set of qualitative and quantitative morphological traits was evaluated. Qualitative traits included plant vigour, growth habit, stem shape, leaf pubescence, depth

of lobing, leaf blade colour, width and lobing, fruit skin colour, fruit shape, seed colour, and seediness. Quantitative traits recorded were vine length (m), number of primary branches, number of nodes per vine, internode length (cm), stem diameter (cm), leaf blade length and width (cm), days to 50% flowering, fruit weight (g), fruit length (cm), fruit diameter (cm), total yield (t ha^{-1}), and seed length and width (cm).

2.8. Yield parameters

Bottle gourd fruits were harvested at physiological maturity. Fruit size was measured in centimetres, and fruit weight was determined using a digital balance. Yield per net plot (kg) was extrapolated to tonnes per hectare using an appropriate conversion factor.

2.9. Data analysis

Data are expressed as mean \pm standard error of the mean (SEM). Differences between two independent groups were assessed using Student's *t*-test in SigmaPlot (v14.0). Statistical significance was set at $p < 0.05$.

3. Results and Discussion

3.1. Analysis of soil properties

The experimental soil was classified as sandy loam with high bulk density, acidic pH, and low levels of organic matter, total nitrogen, and exchangeable cations (Ca, Mg, and Na), indicating poor inherent fertility. Prior to planting, soil in the control treatment (CONBOGG) exhibited a strongly acidic pH (5.01), a condition associated with reduced cation exchange capacity and nutrient availability. Following the application of spiritual blessing/BET, soil pH increased to 5.86, corresponding to a moderately acidic status. In addition, total potassium and exchangeable cations (Ca, Mg, and Na) increased in the BTBOGG treatment (data not shown).

3.2. Morphology of bottle gourd

Different morphological observations related to the growth and development of bottle gourd were recorded

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different time intervals. The growth cycle of bottle gourd from different phases of germination, seedling, plant

vegetative growth, flowering, fruiting, and harvesting stages are shown in **Figure 1**.

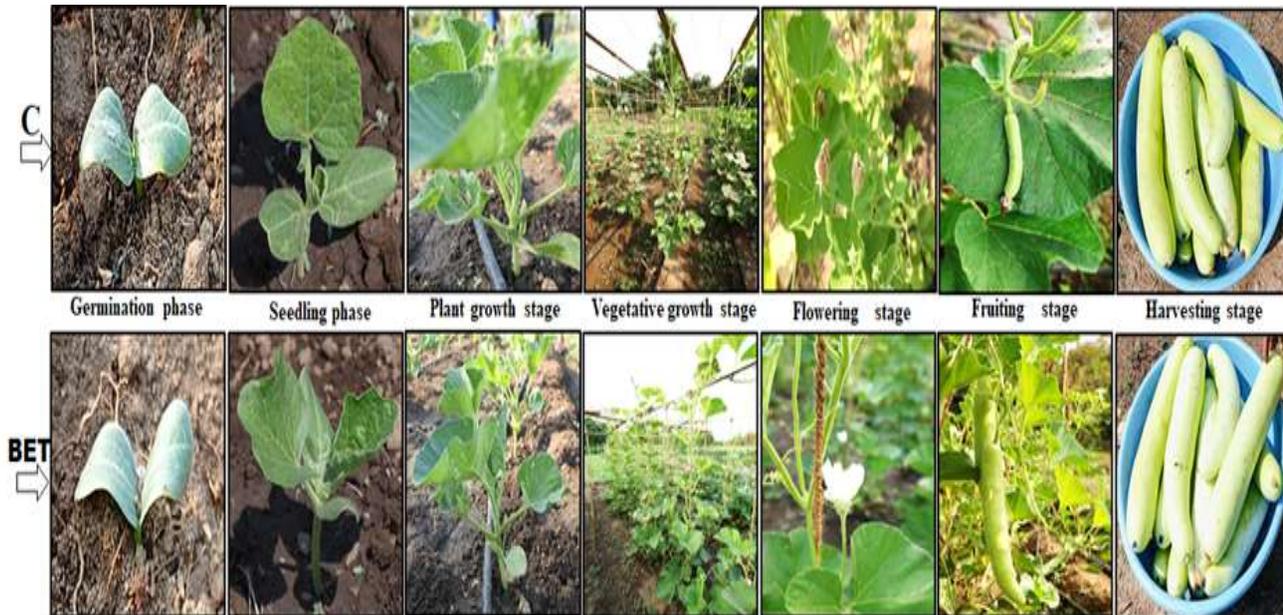


Figure 1. Representative images illustrated the changes in vegetative growth characteristics of bottle gourd at different stages. C: Control group; BET: Blessing/biofield energy treatment group.

The researchers are very keen to find out the way in which farmers can get more yields of bottle gourd all over the world by the use of innovative ideas for improve the genetic varieties. Early plant vigor was very good in the biofield energy treated group (BTBOGG) and it was good in the control group (CONBOGG). Plant growth habit in terms of vine length was longer in BTBOGG and medium in case of CONBOGG. The stem pubescence was dense in BTBOGG and medium in CONBOGG. The leaf size was large in BTBOGG and it was medium in CONBOGG. The leaf pubescence was very soft in BTBOGG and soft in CONBOGG. Upper side of the leaf blade colour was observed as dark green in BTBOGG and medium green in the CONBOGG. The colour of the bottle gourd fruit was dark green in the BTBOGG group, and CONBOGG had medium green fruits. Number of seeds per fruit was more in the BTBOGG, while medium number of seeds observed in the CONBOGG. Other parameters were

similar pattern in both the groups.

Fruit skin colour is an important vegetative trait in bottle gourd that attract the customer predominately. Numerous literature data reported that fruit skin colour of multiple genotypes of bottle gourd. Duhan et al. 2017, reported that the skin colour of bottle gourd was observed as light green, green, mottle green, and striped green in different genotypes. They also showed that no genotype showed dark green colour of fruits. Mahato et al. 2010, demonstrated a whitish to deep green with or without patches in the bottle gourd fruit skin colour in various genotypes. Ciba & Syamala et al. 2017, reported that about 64% cases exhibiting dark green and 25% are light green fruit colour. In this experiment, authors observed dark green fruit in the spiritual (blessing) energy treated group (BTBOGG), while medium green in the CONBOGG group (**Table 1**). Current findings corroborated with the Ciba & Syamala, 2017.



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Table 1. Effects of blessing (biofield) energy treatment on qualitative vegetative parameters of bottle gourd at 80 days after sowing (DAS).

Vegetative trait	Control group (CONBOGG)	Treated group (BTBOGG)
Early plant vigor	Good	Very good
Plant growth habit	Medium vine (2.5-4 m)	Long vine (>4 m)
Stem shape	Angular	Angular
Stem pubescence	Medium	Dense
Tendrils	Present	Present
Tendrils type	Coiled	Coiled
Tendrils 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 (150-300)	Large (>300)

3.3. Phenology and yield traits

The ultimate goal to be achieved in any crop production is maximization of yield. The yield contributing character such as number of female flowers and number of fruits are important yield contributing characters (Kumar, et al. 2024). The germination rate in BTBOGG was increased significantly by 17.76% ($p \leq 0.001$) compared to CONBOGG. At harvest, plant vine length in BTBOGG was 59.50% greater ($p = 0.001$) than in CONBOGG. The number of branches and nodes per vine

in BTBOGG significantly ($p \leq 0.001$) rose by 67.70% and 40.15%, respectively, compared to CONBOGG. Internodal length and stem diameter in BTBOGG significantly ($p \leq 0.001$) increased by 50.12% and 39.20%, respectively, relative to CONBOGG. The number of leaves per plant, leaf length, and leaf width were significantly ($p \leq 0.001$) higher in BTBOGG by 21.03%, 37.87%, and 40.37%, respectively, compared to CONBOGG. Significant differences ($p \leq 0.001$) were observed in the timing of first male and female flower appearance in BTBOGG compared to CONBOGG. The



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number of female flowers in BTBOGG increased by 57.92% ($p = 0.008$) relative to CONBOGG. Peduncle length, fruit weight, fruit length, and fruit width in BTBOGG increased by 33.40% ($p \leq 0.001$), 56% ($p = 0.009$), 32.99% ($p = 0.002$), and 57.14% ($p \leq 0.001$), respectively, compared to CONBOGG. Seed length, seed width, seed count per fruit, and 100-seed weight in BTBOGG were significantly ($p \leq 0.001$) increased by 53.27%, 54.90%, 40.01%, and 25.52%, respectively, compared to CONBOGG. The number of fruits per vine was significantly ($p \leq 0.001$) by 50.39% higher in BTBOGG than in CONBOGG. Fruit yield (ton per hectare) was 61.87% higher in BTBOGG compared to CONBOGG (Table 2).

In the present study, more numbers of female flowers

(57.92%) and fruits per plant (50.39%) were produced in the BTBOGG compared to the CONBOGG (Table 2). Fruit yield positively correlated with number of fruits per plant and plant population. Some study reported that the number plants in protected conditions were higher than the open field conditions were due to closer spacing inside the protected structure (Gaonkar et al. 2023). Gaonkar et al. 2023, study reported the fruit length was 39 cm in the GREEN INDIA (check) genotype and 38 cm in the SHANKAR (check) genotype (Gaonkar et al. 2023). Another study reported the fruit length of bottle gourd (variety 2012/BOGVAR-1) was 36.7 cm (Pandiyan et al. 2019). Here, treatment group showed 38.22 cm fruit length compared to the control.

Table 2. Quantitative evaluation of the phenological and yield characteristics of bottle gourd following spiritual (biofield/prayer) energy treatment.

Vegetative trait	Control group (CONBOGG)	Treated group (BTBOGG)
Days to germination	6-8	6-7
Germination percentage	82.5 ± 0.24	97.15 ± 0.18***
Plant height/Vine length (m)	3.63 ± 0.25	5.79 ± 0.38***
Number of primary branches/vine	5.14 ± 0.24	8.62 ± 0.47***
Number of nodes/vine	82.32 ± 3.05	115.37 ± 5.87***
Internode length (cm)	12.41 ± 0.48	18.63 ± 0.54***
Stem diameter (cm)	1.25 ± 0.08	1.74 ± 0.05***
Number of leaves per plant	179.64 ± 3.88	217.41 ± 5.93***
Leaf length (cm)	15.58 ± 0.62	21.48 ± 0.66***
Leaf width (cm)	11.84 ± 0.33	16.62 ± 0.59***
Days to first male (staminate) flower appearance	35.46 ± 0.57	33.49 ± 0.94***
Days to first female (pistillate) flower appearance	40.58 ± 0.32	37.41 ± 0.45***
Days to 50% flowering	53.74 ± 1.26	49.75 ± 1.39
Number of male flowers	52.44 ± 4.33	76.38 ± 6.17*
Number of female flowers	20.72 ± 2.46	32.72 ± 2.37**
Days to first harvest	72.33 ± 1.62	70.41 ± 1.59
Peduncle length (cm)	9.34 ± 0.27	12.46 ± 0.31***
Fruit weight (kg)	1.25 ± 0.14	1.95 ± 0.15**
Crop duration (days)	118.58 ± 3.62	120.06 ± 2.82
Fruit length (cm)	28.74 ± 1.71	38.22 ± 1.16**
Fruit width (cm)	10.36 ± 0.53	16.28 ± 0.25***
100-seed weight (gm)	13.57 ± 0.05	17.44 ± 0.03***
Seed length (cm)	1.07 ± 0.01	1.64 ± 0.02***



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Table 2 Continue

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Seed width (cm)	0.51 ± 0.01	0.79 ± 0.02***
Seed count/fruit	265.72 ± 3.20	372.38 ± 5.41***
Number of fruits per plant	5.16 ± 0.14	7.76 ± 0.18***
Fruit yield (kg)	41.23	66.76
Fruit yield/sq. m plot (kg/sq. m)	1.22	1.98
Fruit yield/hectare (ton/ha)	12.22	19.78

Data represented as mean ± SEM (n = 5); * $p \leq 0.05$, ** $p \leq 0.01$, and *** $p \leq 0.001$ vs control group (CONBOGG) using Student's *t*-test

5. Conclusion

The present study demonstrated that application of the Spiritual Blessing Energy/Prayer-Trivedi Effect® was associated with significant improvements in vegetative growth, phenological traits, and yield of bottle gourd compared with the control. This complementary and alternative approach showed potential to enhance crop productivity, while contributing to the maintenance of soil health. Collectively, these outcomes suggest that the blessing/BET-Trivedi Effect® may represent a viable and economically attractive option for sustainable bottle gourd cultivation.

Abbreviations

NPK: nitrogen phosphorus potassium; CAM: complementary and alternative medicine; BET: biofield 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

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Conflict of Interests

Author MKT was employed by Trivedi Global, Inc. NRP, VDK, and TBG 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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