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An Exploratory Study on the Efficacy of Non-Invasive Blessing (Prayer) Energy Treatment in Enhancing Growth and Yield of Okra Crop

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Abstract: **Background:** Okra (*Abelmoschus esculentus*) is a high-value vegetable crop critical to global food security. Consequently, there is a growing demand for sustainable, non-invasive agricultural technologies to optimize crop vigor and maximize output. **Objective:** This exploratory study investigated the efficacy of blessing/biofield energy treatment as a novel, non-chemical intervention to enhance okra germination, physiological development, and overall yield. **Methods:** In a randomized complete block design, okra seeds and plots were divided into treated (subjected to specific biofield energy modalities) and untreated control groups. Vegetative and reproductive growth parameters, including germination, plant height, leaf area, and marketable fruit yield, were systematically monitored over a 72-day cropping cycle. **Results:** Phenological traits such as number of branches per plant, internodal length, leaf number, fruit weight, and fruit diameter were significantly increased by 53.92% ($p \leq 0.001$), 29.98% ($p = 0.013$), 35.38% ($p \leq 0.001$), 43.69% ($p \leq 0.001$), and 31.1% ($p \leq 0.001$), respectively, in the treatment group compared to the control group. Besides, okra yield was increased by 49.32% in the treatment group compared to the control. **Conclusion:** The study findings demonstrate that spiritual blessing (biofield) energy treatment can materially improve plant phenotypes, boost reproductive output and enhance crop productivity.

Keywords: Fruit yield, okra, spiritual blessing, prayer, morphology, vegetative growth, phenological development

INTRODUCTION

Global agriculture is currently facing unprecedented challenges driven by accelerating climate change, soil degradation, and the shifting dynamics of biotic and abiotic stresses that threaten food security [1]. To sustain an expanding global population, conventional farming practices have historically relied heavily on synthetic chemical fertilizers and intensive irrigation. However, these methods increasingly lead to long-term ecological damage, high operational costs, and diminishing returns in crop yield [2]. Consequently, modern agricultural research has shifted focus toward sustainable, eco-friendly, and non-destructive "precision agriculture" solutions. Among these innovations, the application of non-invasive physical energy modalities such as specialized electromagnetic fields (EMFs), static or alternating magnetic fields (MFs), and target-specific biofield energy vibrations has emerged as a highly promising alternative to chemical biostimulants [3, 4]. Non-invasive energy modalities operate on the principle of altering biophysical and biochemical pathways at the cellular level without causing structural damage or introducing exogenous chemical residues into the plant system. Recent investigations demonstrate that exposing seeds or developing crops to specific low-to-medium level continuous or pulsed magnetic fields can trigger early germinative cycles, amplify cell division, optimize photosynthetic pigment synthesis, and boost macro-nutrient absorption mechanisms [4]. While the biological mechanisms behind electromagnetic field interactions are being actively mapped, a parallel field of biophysical research focuses on the impact of subtle energy fields or biofield interventions. In controlled bioassays, direct exposures to non-invasive vibrational biofields and target-oriented healing intent have demonstrated biological efficacy on seed germination rates and subsequent seedling vigor comparable to traditional physical biostimulation [5].

For instance, the influential works of Branton et al., own research article has historically laid foundational data regarding the profound effects of biofield (blessing) energy treatments on agricultural parameters, revealing altered phenological characteristics, improved vegetative profiles, and significantly increased yield profiles across various crops [6-8]. Given the profound nutritional and economic importance of okra (*Abelmoschus esculentus L.*) in tropical and subtropical regions, a non-invasive spiritual blessing (biofield)-energy treatment was provided to both seeds and land to see the impact on vegetative growth and yields.

MATERIALS AND METHODS

Materials and Experimental Design

High-purity seeds of okra (*Abelmoschus esculentus* L. Moench, cv. 'Jenifer') with 95% genetic purity (Lot No. NUA-54012353; Label: 17387) were procured from Namdeo Umaji Agritech (India) Pvt. Ltd. The experiment followed a Randomized Complete Block Design (RCBD) divided into two cohorts: A control okra group (CONOKG), maintained under standard baseline conditions, and a blessing treated okra group (BTOKG), subjected to a Spiritual Blessing (Biofield) Energy Treatment (SBET). To isolate the physiological and phenotypic effects of the SBET intervention and eliminate environmental confounders, all post-treatment agronomic practices, including irrigation schedules and pest management protocols were kept strictly uniform across both cohorts throughout the experimental timeline.

Location and Environment

The field experiment was conducted at Bhandarwadi in the Sindhudurg district of Maharashtra, India (15°37'–16°40' N, 73°19'–74°13' E) at an elevation of 26 m above mean sea level. Situated within the tropical Konkan agro-climatic zone, the region experiences peak temperatures of 39–42°C during the pre-monsoon season. High interannual rainfall variability frequently causes severe soil moisture deficits. This moisture limitation exacerbates crop vulnerability to drought stress, disrupting critical physiological mechanisms during key phenological growth stages.

Field Layout

The experiment followed a RCBD with three blocks, each split into two distinct plots. The total experimental area of 50 m^2 was divided into six individual plots (3.5 m × 2 m each, totaling 7 m^2 per plot), separated by 0.5 m buffer zones to prevent cross-contamination. Crops were planted at a standard spacing density of 0.5 m × 0.5 m.

Spiritual Blessing and Prayer (Biofield) Treatment Strategy

The experimental setup comprised two primary treatment arms: an untreated control okra seed (CONOKG) and a remote biofield energy-treated okra cohort (BTOKG). The BTOKG seeds and plot soil received a 4-minute distance-blessing energy intervention (the Trivedi Effect®) 1 day pre-planting. The blessing energy was transmitted *via* an online web-conferencing platform by an expert practitioner with more than 12 years expertise, Ms. Alice Branton in this fields and focusing intentional energy from Florida, USA. Environmental parameters during the allocation and administration phases were rigidly maintained at 27 ± 2 °C and 64 ± 5% relative humidity across both cohorts to guarantee experimental uniformity.

Soil Properties

To establish baseline soil characteristics, composite core samples from the top 30 cm of each experimental plot were collected using a systematic five-point matrix method. Then, the samples were air-dried to a constant weight under ambient conditions, mechanically sieved them (2-mm mesh) to achieve homogeneity, and preserved them at 4 °C. Soil granulometric analysis followed through an established standardized protocol [9]. Lastly, soil pH was measured potentiometrically in a 1:2 (w/v) aqueous suspension (soil:deionized water) using a pre-calibrated glass-electrode meter.

Sowing, Irrigation, and Crop Management

Post-sowing, plots received manual irrigation for a 7-day establishment period, followed by automated drip irrigation *via* pressure-compensating emitters (0.5-m spacing; 3 L/h discharge). Basal N:P:K fertilizer was applied at 50:100:50 kg/ha. The entire doses of phosphorus (as SSP) and potassium (as MOP), plus 50% of the nitrogen (as urea), were incorporated pre-sowing; the remaining 50% N was top-dressed at 21 days after sowing (DAS). Pests were managed uniformly across all treatments using a foliar application of Hamla 550 (Gharda Chemicals Ltd., Mumbai, India) at a dosage of 2 mL/L.

Agromorphological and Phenotypic Assessment

Phenotypic characterizations were performed 72 DAS using five randomly selected plants per plot. Standardized descriptors were employed to evaluate qualitative traits across four categories: vegetative architecture (e.g., growth habit, branching, canopy, stem pigmentation), foliar morphology (e.g., margin dentation, lobing depth, blade dimensions, pubescence), reproductive features (floral dimensions and coloration), and fruit/seed traits (shape, color, and seediness). Concurrently, six quantitative agronomic metrics were measured: plant height, branch count, stem diameter, days to 50% flowering, fruit length, and fruit diameter.

Yield and Morphometric Characterization

To evaluate yield components and physical traits, okra (*Abelmoschus esculentus*) pods were harvested at full maturity. We measured fruit length and width using a digital caliper and weighed individual pods on a high-precision electronic balance. To determine total crop productivity, five plants were randomly selected from each test plot. The total weight of the harvested okra from each plot was recorded in kilograms and then converted to estimate the overall yield per hectare in metric tonnes (t/ha).

Data Analysis

Statistical differences between the two independent groups were evaluated using a two-tailed Student's *t*-test. Data are expressed as mean ± standard error of the mean (SEM). All statistical analyses were performed using SigmaPlot (version 14.0), with statistical significance defined as $p < 0.05$.

RESULTS

Soil Properties Analysis

The BTOKG treatment group outperformed than CONOKG in key physicochemical parameters, demonstrating superior water-holding capacity and enriched levels of exchangeable cations (Ca^{2+}, Mg^{2+}, and Na^{+}). These findings indicate a substantive modification of the sandy loamy soil matrix (data not shown).

Morphology of Okra Plants

We measured the growth stages of okra (*Abelmoschus esculentus*) at regular intervals. Our observations tracked the plants' entire life cycle, from seed germination and seedling establishment through vegetative growth, flowering, pod development, and final harvest maturity (**Figure 1**).

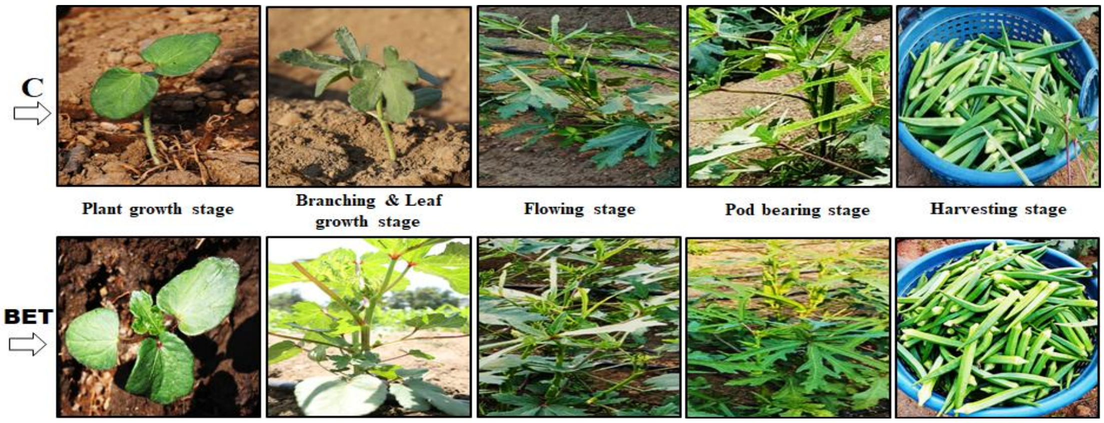

Figure 1: Rrepresentative images showed the vegetative growth characteristics of okra at different stages. C: Control group; BET: Blessing/biofield energy treatment group.

Morphological Descriptors

The Trivedi Effect® energy-treated okra group (BTOKG) exhibited pronounced variations in vegetative and reproductive phenotypes compared to the untreated control group (CONOKG). Vegetatively, BTOKG demonstrated an expansive plant spread area coupled with robust branching, whereas CONOKG displayed a broad spread with intermediate branching. Foliar and cauline pigmentation was notably darker in the treatment group; BTOKG exhibited dark green stems and leaves alongside intense dark violet anthocyanin expression, compared to the standard green tissue and greenish-violet pigmentation of CONOKG. Laminar morphology also varied significantly between the cohorts. BTOKG leaves were characterized by greater blade width, deep lobing (strong overall blade lobing), an obtuse apex angle, and strongly dentate margins. Conversely, CONOKG leaves possessed narrower blades with intermediate lobing, an acute apex angle, and moderately dentate margins. Trichome density and spine development were higher in the treatment group, which presented an intermediate number of prickles and high pubescence (greater than 100 leaf hairs) relative to the sparse prickles and lower trichome count (less than 50 hairs) observed in CONOKG. Venation patterns further distinguished the groups, with CONOKG showing light greenish-purple veins and medium green interveinal intensity, while BTOKG displayed purple-green veins and dark green interveinal coloration. Reproductive and fruit characteristics mirrored these robust phenotypic shifts. At anthesis, BTOKG exhibited yellow-crimson flowers, a deeper shade than the pale yellow-crimson corollas of CONOKG. Post-fertilization, BTOKG yielded dark green fruits containing intermediate-sized, brown seeds with significantly elevated seediness (greater than 50 seeds per fruit). In contrast, CONOKG produced green fruits housing small, greenish-brown seeds with lower seediness (less than 30 seeds per fruit). Despite these prominent modifications, other critical morphological markers, specifically plant growth habit, flower size, flower bud color, flower bud size, and apical fruit shape, remained invariant between BTOKG and CONOKG following the biofield energy treatment (**Table 1**).

Table 1: Effects of Spiritual Blessing (Biofield) Energy Treatment on the Vegetative Growth of Okra

Vegetative Trait	Control Group (CONOKG)	Treated Group (BTOKG)
Plant growth habit	Upright	Upright
Plant spread	Broad (>45 cm)	Very broad (>60 cm)
Plant branching	Intermediate (3-5)	Strong (>5)
Stem color	Green	Dark Green
Dentation of leaf margin	Medium	Strong
Depth of leaf lobbing	Medium	Deep
Pigmentation	Greenish violet	Dark violet
Leaf color	Green	Dark Green
Leaf vein color	Light greenish purple	Purple green
Color between veins	Medium green	Dark green
Leaf blade width	Narrow (< 5 cm)	Wide (>10 cm)
Leaf blade lobing	Intermediate (<5)	Strong (>7)
Leaf blade tip angle	Acute (3)	Obtuse (>7)
Leaf prickle	Few (3-5)	Intermediate (10-20)

Leaf hairs	Few (<50)	Many (>100)
Flower color	Pale yellow crimson	Yellow crimson
Flower size	Small	Small
Flower bud color	Purplish Green	Purplish Green
Flower bud size	Small	Small
Fruit shape apex	Narrow	Narrow
Fruit colour	Green	Dark Green
Seed colour	Greenish brown	Brown
Seed size	Small (< 2 mm)	Intermediate (> 3 mm)
Seediness (number of seeds/ fruit)	Medium (<30)	High (> 50)

Phenology and Yield Traits

Analysis of phenological and morphological traits revealed that the BTOKG group outperformed the CONOKG control across all growth stages, ultimately leading to a 49.32% increase in overall fruit yield (t/ha). This total yield boost was driven by improvements across four key areas:

- **Early Development:** BTOKG significantly accelerated germination rates by 12.83% ($p \leq 0.001$) and increased final plant height by 18.61% ($p \leq 0.001$).
- **Plant Architecture:** Structural expansion was pronounced, with significant increases in stem collar diameter (25.35%, $p \leq 0.001$), number of branches per plant (53.92%, $p \leq 0.001$), and internodal length (29.98%, $p = 0.013$).
- **Photosynthetic Capacity:** The significant ($p \leq 0.001$) structural gains correlated with a larger canopy, including increases in leaf number (35.38%), leaf length (19.79%), and peduncle length (21.98%).
- **Reproductive Metrics:** Fruit traits were universally elevated ($p \leq 0.001$), including fruit weight (43.69%), length (22.36%), diameter (31.1%), girth (27.27%), and ridge count (16.73%), alongside a 24.95% increase in 100-seed weight (**Table 2**).

Table 2: A quantitative study on how spiritual energy treatments affect okra development and yield.

Vegetative Trait	Control Group (CONOKG)	Treated Group (BTOKG)	P value
Days to germination	5-7	5- 6	-
Germination percentage	84.11 ± 0.36	94.90 ± 0.18	$p \leq 0.001$
Plant height (cm)	77.21 ± 1.34	91.58 ± 1.47	$p \leq 0.001$
Stem collar diameter (cm)	1.42 ± 0.05	1.78 ± 0.04	$p \leq 0.001$
Number of branches per plant	4.21 ± 0.13	6.48 ± 0.26	$p \leq 0.001$
Internodal length (cm)	4.67 ± 0.12	6.07 ± 0.42	$p = 0.013$
Number of leaves per plant	19.56 ± 0.78	26.48 ± 0.66	$p \leq 0.001$
Leaf length (cm)	13.14 ± 0.18	15.74 ± 0.19	$p \leq 0.001$
Leaf width (cm)	14.26 ± 0.46	14.35 ± 0.09	$p = 0.853$
Peduncle length (cm)	1.82 ± 0.02	2.22 ± 0.07	$p \leq 0.001$
Days to first flowering	42.56 ± 1.24	41.16 ± 0.36	$p = 0.310$
Days to 50% flowering	51.82 ± 0.37	50.45 ± 0.22	$p = 0.013$

Days to first fruiting	54.68 ± 1.40	53.77 ± 1.02	$p = 0.614$
Fruit pedicel length (cm)	1.43 ± 0.57	1.61 ± 0.03	$p = 0.761$
Days to first harvest	64.68 ± 1.54	65.52 ± 1.50	$p = 0.706$
Fruit weight (gm)	9.04 ± 0.15	12.99 ± 0.18	$p \leq 0.001$
Duration of crop (days)	98.08 ± 1.73	98.26 ± 1.87	$p = 0.945$
Fruit length (cm)	10.24 ± 0.13	12.53 ± 0.09	$p \leq 0.001$
Fruit diameter (cm)	1.64 ± 0.04	2.15 ± 0.03	$p \leq 0.001$
Girth of fruit (cm)	1.21 ± 0.03	1.54 ± 0.05	$p \leq 0.001$
Number of fruit ridge	5.20 ± 0.05	6.07 ± 0.05	$p \leq 0.001$
100-seed weight (gm)	5.37 ± 0.14	6.71 ± 0.14	$p \leq 0.001$
Number of fruits per plant	32.18	37.28	-
Fruits yield per plant (kg/plant)	0.28	0.37	-
Total fruit yield (kg)/plot	24.58	36.68	-
Fruit yield/sq. m plot (kg/sq. m)	1.17	1.75	-
Fruit yield/hectare (t/ha)	11.70	17.47	-

Data represented as mean ± SEM (n = 5); $p \leq 0.05$ *vs*. control okra group (CONOKG) using Student's *t*-test

DISCUSSION

The comparative analysis of phenological and morphological traits demonstrated that the spiritual blessing (biofield) energy-treated okra group (BTOKG) significantly outperformed the control group (CONOKG), resulting in a substantial increase in overall fruit yield (t/ha). This robust yield surge underscores how targeted physiological alterations can maximize source-to-sink carbohydrate transitions and vegetative performance. These developments are highly consistent with the overarching framework established by Sheferie et al. 2023 [10], which confirmed that substantial improvements across baseline agronomic parameters directly dictate final crop output in okra cultivars. The performance gains began during the earliest life stages, where the BTOKG group displayed an acceleration in germination rates and an increase in final plant height. Rapid seed germination was a fundamental prerequisite for successful crop establishment, particularly in okra where a hard seed coat often creates erratic and uneven field emergence. This accelerated early development matches observations reported by Anil Balchhaudi, 2023 [11], emphasizing that accelerated germination parameters were foundational to enhanced plant vigor. Furthermore, this initial vigor directly correlates with taller, sturdier plants during later growth stages, as supported by Sarma et al. 2025 [12], where early physiological improvements significantly advanced baseline plant heights. A thicker stem combined with enhanced branching creates a robust physical framework capable of sustaining a much higher fruit load without lodging. The direct relationship between optimized branch production, height management, and direct increases in harvest metrics was thoroughly explored by Koirala et al. 2025 [13], which established that branching alterations expand the primary fruit-bearing zone to drive commercial yield upscaled performance.

The structural gains achieved by the treated group perfectly synchronized with an expanded canopy, yielding significant increases in leaf number, leaf length, and peduncle length. A larger leaf count and length exponentially increase the total surface area available for light interception, maximizing net photosynthetic rates and subsequent carbohydrate accumulation. The critical importance of optimizing leaf development to sustain higher biometric yield attributes in okra crops is fully verified by Omolade et al. 2024 [14]. Additionally, these synchronized vegetative improvements parallel the findings of Mukhtar et al. 2024 [15], which demonstrated that strong initial vegetative optimization produces definitive boosts in stem diameters and leaf abundance.

This highly efficient vegetative foundation translated into an across-the-board elevation of reproductive metrics, including fruit weight, length, diameter, girth, and ridge count, coupled with an increase in 100-seed weight (**Table 2**)**.** These specific morphometric pod characteristics represent the primary yield components that directly dictate commercial crop weights at harvest demonstrated by Shivaramegowda et al. 2016 [16], total fruit yield exhibits an incredibly robust, positive, and statistically significant correlation with individual fruit weight, fruit girth, and the number of primary branches. Furthermore, the role of detailing and optimizing individual pod dimensions to enhance overall fruit quality and crop value was strongly reinforced by Yildiz et al. 2025 [17].

CONCLUSION

The evaluation of phenological, vegetative, and reproductive traits demonstrates that the BTOKG group significantly outperforms than CONOKG, culminating in a substantial increase in overall fruit yield (t/ha). Ultimately, BTOKG systematically improved architecture and photosynthetic capacity and maximize the yields of okra.

Abbreviations

SBET: spiritual blessing energy treatment; CONOKG: control okra group; BTOKG: biofield energy-treated okra group; SSP: single super phosphate; MOP: muriate of potash

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Conflict of Interests

Author AB was employed by Trivedi Global, Inc. VDK, NRP, 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.

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