Journal of Agricultural Economics, Extension and Rural Development
Abbreviated Key Title: J. Agric. Econs. Extens. Rural Dev.
ISSN-2360-798X (Open Access): doi.org/10.54978/jaeerd
Vol 14: (7): Pp.: 73-80, 2026

Evaluation of the Blessing (Biofield) Energy Treatment for Improving Radish Growth and Crop Yield

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Abstract

Sustainable agriculture urgently requires innovative, non-chemical, and non-invasive technologies to enhance food security, improve crop productivity, and optimize resource-use efficiency. Blessing (Biofield) Energy Treatment has emerged as a novel approach with potential applications in altering the physiological and therapeutic characteristics of living organisms. This study investigated the impact of a Spiritual Blessing (Biofield) Energy Treatment (SBET) on the germination, growth, and overall crop yield of radish (*Raphanus sativus*), a globally important root vegetable. A study was conducted using a randomized complete block design. Radish seeds and soil plots were divided into two main categories: control (untreated) radish group (CONRSG) and Biofield Energy Treated radish group (BTRSG). The blessing treatment was administered remotely by a renowned practitioner. Both groups were maintained under identical agro-climatic and nutritional conditions. Various vegetative traits such as leaf length, leaf width, number of lobes in the leaf blades, leaf blades hairs, root shape, and root pungency were satisfactorily improved in the BTRSG compared to the CONRSG. Moreover, various yield traits such as leaf number per plant, leaf width, root length, root girth, and root weight per plant were significantly increased by 29.61% ($p = 0.004$), 61.23% ($p \le 0.001$), 40.42% ($p \le 0.001$), 42.91% ($p \le 0.001$), and 41.40% ($p \le 0.001$), respectively, in the BTRSG compared to the CONRSG. Consequently, final root yield (t ha^{-1}) of the BTRSG group exhibited a 45.20% increase over the control (CONRSG). These findings underscore the potential of the SBET strategy to fundamentally alter biomass partitioning and enhance agronomic performance of radish, offering a scalable solution for high-yielding cultivation systems.

Keywords: radish, spiritual blessing, biofield treatment, plant morphology, crop yield, *Raphanus sativus*

Accepted 5/7/2026 J. Agric. Econ. Ext. Rural Dev. (ISSN: 2360-798X) Published: 18/7/2026

INTRODUCTION

Radish (*Raphanus sativus* L.) is an economically significant, fast-growing root vegetable cultivated globally across tropical and temperate regions due to its rich nutritional profile and short crop cycle [1]. In contemporary agriculture, optimizing the early vegetative growth and root development of radishes is a primary objective for maximizing overall crop productivity [2]. The accumulation of biomass and final storage root yield in radishes are strongly dependent on efficient physiological processes, including photosynthetic capacity, enhanced chlorophyll content, and stable metabolic activities [3]. However, conventional radish cultivation faces severe bottlenecks due to changing environmental dynamics and soil-degrading inputs. Indiscriminate use of chemical fertilization to drive yield improvements has introduced severe ecological issues, including soil compaction,

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decreased microbial activity, and disrupted crop-nutrient retention capacity [4]. Furthermore, critical early development and seedling stages remain highly sensitive to local phosphorus availability and root-zone stressors [5]. To counter these limitations, modern agricultural science has increasingly pivoted toward alternative, sustainable, and non-chemical biostimulatory interventions that can alter plant morpho-physiology without ecological compromise [3].

Among emerging non-invasive technology frameworks, biofield energy treatments have gained academic traction for their purported capacity to modify the intrinsic characteristics of biological systems at cellular levels. The utilization of conscious intentionality frameworks or bioelectromagnetic inputs presents a novel frontier in agricultural yield optimization. Trivedi et al. previously documented significant modifications in the physiological development, seed germination characteristics, and structural variations of root crops subjected to specialized energy transmission protocols [6, 7]. Despite initial observations, the precise mechanisms by which blessing (biofield) interventions modulate biomass allocation, photosynthetic efficiency, and downstream harvest metrics in Raphanus sativus require a robust, systematic evaluation. This study was designed to address these gaps by evaluating a distant blessing (biofield) energy regimen applied to radish seeds and lands. Through a meticulous appraisal of morphometric traits, vegetative growth speed, and final crop yield, this research establishes a definitive baseline for implementing blessing (biofield) energy treatment as a viable, sustainable technique for modern horticulturists.

MATERIALS AND METHODS

Experimental site details

Field experiment was carried out in the tropical Konkan agro-climatic zone at Bhandarwadi, Sindhudurg, Maharashtra, India (15°37'–16°40' N, 73°19'–74°13' E; 26 m elevation). The site experiences extreme pre-monsoon thermal maximums (38–41°C) and high interannual rainfall variability. This erratic precipitation profile drives severe soil moisture deficits, elevating crop vulnerability to moisture stress and threatening key physiological mechanisms during critical phenological phases.

Seed material and experimental layout

Radish seeds (*Raphanus sativus* L., cv. 'Desi Golden/Pusa Chatki'; 98% genetic purity; Lot No. NURGF099) were obtained from Namdeo Umaji Agritech (India) Pvt. Ltd. Seeds were allocated into either a control group or a treatment group exposed to a spiritual blessing energy treatment (SBET). All baseline environmental and agronomic variables (irrigation, fertilization, and pest management) were kept identical across both experimental groups for the duration of the study.

Field Layout

The experiment was conducted using a randomized complete block design (RCBD) with two treatments replicated three times: an untreated control (CONRSG) and a biofield energy treatment (BTRSG). While the CONRSG group received no intervention, the seed stock and designated soil for the BTRSG cohorts were subjected to biofield energy application prior to sowing. The experimental layout comprised six plots (each 2.5 m × 1.5 m), maintaining an intra-plot crop spacing of 0.5 m × 0.5 m and a 0.5 m buffer zone between adjacent plots and blocks, culminating in a total experimental area of 30.0 m². Prior to planting, the site was cleared, and a basal NPK fertilizer was uniformly incorporated into the soil of each plot at a rate of 50, 100, and 50 kg ha^{-1} for N, P, and K, respectively.

Spiritual blessing (prayer) energy treatment strategy

Spiritual blessing (prayers/biofield) energy treatment (SBET) was provided by Ms. Alice Branton in the BTRSG (both radish seeds and soil) *via* an online web-conferencing platform from Florida, USA. However, the CONRSG (seeds and soil) did not receive any treatment. During blessing the following criteria/conditions were maintained –

- ✓ *Blessing exposure time*: approximately 4 minutes.
- ✓ *Mode of blessing*: distant/remotely from Florida, USA *via* an online web-conferencing platform
- ✓ *Practitioner's experience*: more than 14 years.
- ✓ *Environmental conditions during blessing*: temperature (28 ± 2°C) and relative humidity (65 ± 5%).
- ✓ *Frequency of blessing*: single

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Soil features

To establish baseline physicochemical characteristics, composite soil samples were retrieved from the upper 30 cm profile of each plot using a five-point sampling pattern. Samples were air-dried to a constant weight, passed through a 2-mm mesh sieve to ensure homogeneity, and maintained at 4 °C prior to downstream analysis. Soil particle size distribution was quantified following established protocols [8]. Potentiometric pH was determined in a 1:2 (w/v) soil-to-distilled water suspension using a calibrated digital pH meter.

Seed plantation and farming management

Post-sowing, a 7-day manual irrigation regimen was maintained for seedling establishment prior to the initiation of a surface drip irrigation system (pressure-compensating emitters at 0.5-m spacing; 3 L h^{-1} discharge rate). Basal fertilization consisted of 50:100:50 kg ha^{-1} of N:P:K. The entire doses of P (as single superphosphate, SSP) and K (as muriate of potash, MOP) were applied at planting combined with 50% of the total N (as urea); the remaining N was side-dressed at 21 days after sowing (DAS). Agronomic uniformity was maintained across all treatments by managing insect with a foliar application of a commercial insecticide mixture (50% chlorpyrifos + 5% cypermethrin; Hamla 550, Gharda Chemicals Ltd., Mumbai, India) at 2 mL L^{-1}.

Growth parameters of radish

At 45 days after sowing (DAS), five plants per plot were randomly selected to evaluate key morphological and agronomic traits. Qualitative attributes assessed encompassed leaf blade color, lobing, trichome density, root shape, internal (flesh) and external coloration, and aroma. Quantitative metrics comprised plant length, leaf number per plant, leaf blade dimensions (length and width), leaf fresh weight, root length, root diameter, and total yield (t ha^{-1}).

Yield parameters of radish

Radish fruits were harvested at physiological maturity and the morphometric attributes, including fruit dimensions (cm) and fresh mass (g) were quantified using a digital vernier caliper and a precision electronic balance, respectively. To evaluate yield-contributing traits, five plants were randomly selected from each plot. Total net plot yield (kg) was subsequently converted and expressed in tonnes per hectare (t ha^{-1}).

Statistical analysis

Data are expressed as mean ± SEM. Following verification of normality and equal variance, differences between the two independent cohorts were analyzed *via* Student's *t*-test. All statistical analyses were conducted using SigmaPlot (version 14.0), with significance set at $p < 0.05$.

RESULTS

Soil properties

Relative to CONRSG, the BTRSG treatment significantly altered the sandy loam soil matrix, resulting in enhanced water-holding capacity and elevated concentrations of exchangeable cations (Ca^{2+}, Mg^{2+}, and Na^{+}; $P < 0.05$) (data not shown).

Morphological characteristics

The morphological characteristics of radish (*Raphanus sativus*) were systematically evaluated at

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predefined intervals from seed germination through vegetative growth, flourishing, and final harvest (**Figure 1**).

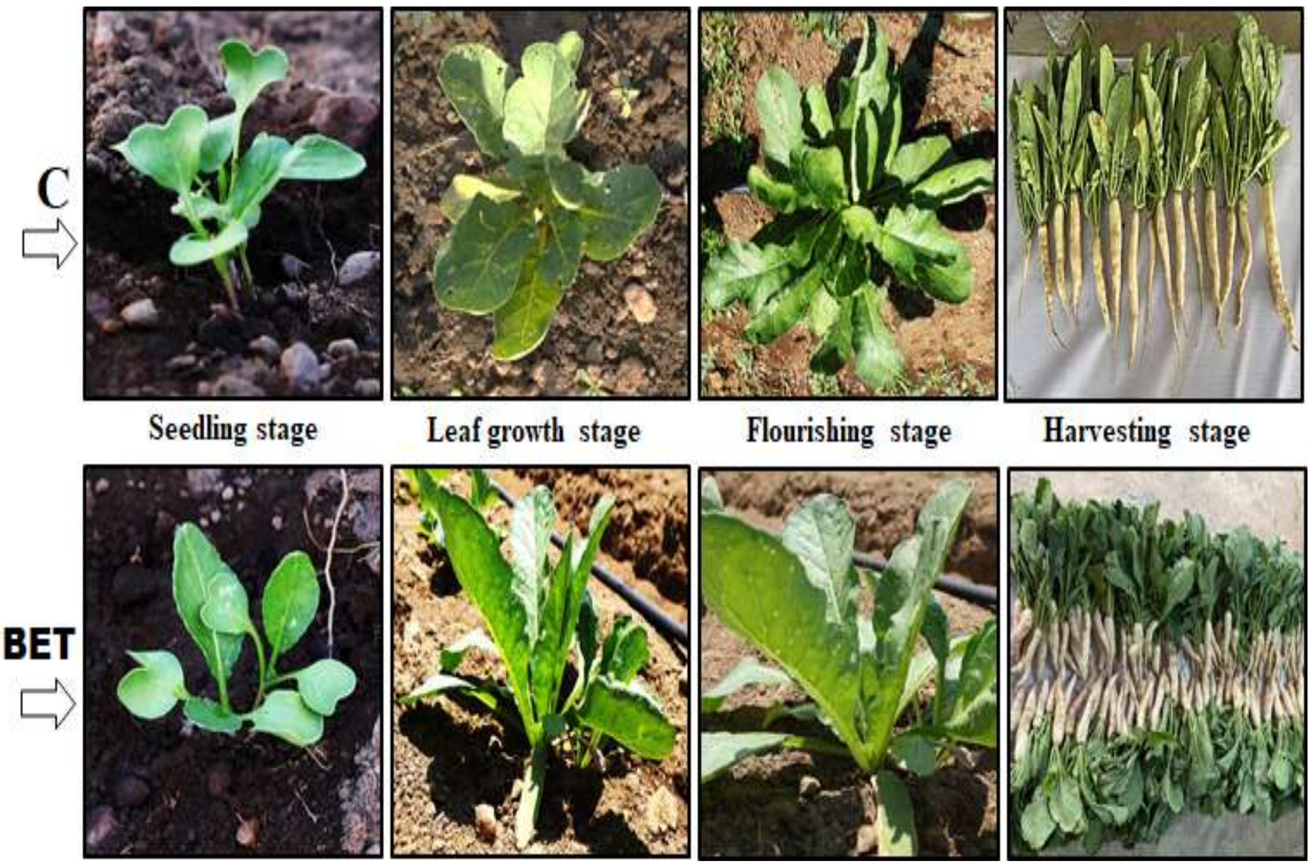

Figure 1. Changes in the vegetative growth characteristics of radish (*Raphanus sativus)* throughout the developmental trajectory. C: Control group; BET: Blessing/biofield energy treatment group.

Vegetative and root morphological attributes

Foliar and root morphology differed significantly between the two groups. BTRSG was characterized by intermediate leaf length (20–30 cm), greater leaf width (>10 cm), and dark green laminae, whereas CONRSG exhibited shorter leaves (9–20 cm), intermediate width (4–8 cm), and light green laminae. Additionally, CONRSG leaves possessed fewer lobes and sparse trichome density, contrasted with the intermediate lobe number and moderate trichome density observed in BTRSG. Distinct variations were also noted in root traits; CONRSG and BTRSG displayed narrow-triangular and medium-triangular root shapes, respectively. Furthermore, BTRSG root flesh was highly pungent, whereas CONRSG was mildly pungent. Several traits were monomorphic across both genotypes, including an obtuse leaf apex, an entire margin, and white root skin and flesh (Table 1).

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Table 1. Effects of spiritual blessings (biofield) energy treatment on vegetative parameters of radish at 45 days after sowing (DAS).

Vegetative trait	Control group (CONRSG)	Treatment group (BTRSG)
Leaf length	Short (9-20 cm)	Medium (20-30 cm)
Leaf width	Medium (4-8 cm)	Long (>10 cm)
Leaf blade shape of the apex	Obtuse	Obtuse
Leaf blade margin	Entire	Entire
Leaf blade colour	Mild green	Dark green
Number of lobes in the leaf blade	Few	Medium
Leaf blade: density of hairs	Sparse	Intermediate
Root shape	Narrow triangular	Medium triangular
Root colour	White	White
Root flesh colour	White	White
Root smell pungency	Less pungent	Pungent

Phenology and yield traits

The germination rate in the BTRSG group was significantly ($p \leq 0.001$) higher by 9.18% than that of the control (CONRSG). Morphological parameters related to canopy growth including leaf number per plant, leaf width, and fresh weight of leaf per plant were significantly increased by 29.61% ($p = 0.004$), 61.23% ($p \leq 0.001$), and 20.80% ($p \leq 0.001$), respectively, in the BTRSG compared to the CONRSG. Furthermore, root length, root girth, and root weight per plant were significantly ($p \leq 0.001$) increased by 40.42%, 42.91%, and 41.40%, respectively in the BTRSG with respect to the CONRSG. Driven by these improvements, the final root yield (t ha^{-1}) of the BTRSG group exhibited a 45.20% increase over the control (CONRSG) (Table 2).

Table 2. Evaluation of the phenological and yield characteristics of radish after spiritual blessing (biofield/prayer) energy treatment (SBET).

Vegetative trait	Control group (CONRSG)	Treatment group (BTRSG)	P value
Days to germination	5-7	5-6	-
Germination percentage (%)	88.37 ± 0.15	96.48 ± 0.28	$p \leq 0.001$
Plant height (cm)	27.78 ± 4.01	40.32 ± 3.95	$p = 0.056$
Number of leaves per plant	12.46 ± 0.87	16.15 ± 0.33	$p = 0.004$
Leaf length (cm)	22.10 ± 2.14	27.51 ± 1.92	$p = 0.097$
Leaf width (cm)	7.48 ± 0.45	12.06 ± 0.32	$p \leq 0.001$
Fresh weight of leaves per plant (gm)	114.60 ± 4.08	138.44 ± 2.78	$p = 0.001$
Root length (cm)	17.91 ± 0.23	25.15 ± 0.68	$p \leq 0.001$
Root width/girth (cm)	5.01 ± 0.21	7.16 ± 0.32	$p \leq 0.001$
Root weight per plant (gm)	132.57 ± 2.87	187.46 ± 1.36	$p \leq 0.001$
Root yield (kg)/plot	9.14	13.26	-
Root yield/sq. m plot (kg/sq. m)	0.81	1.18	-
Root yield/hectare (ton/ha)	8.12	11.79	-

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

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DISCUSSION

The phenotypic divergence in foliar architecture between the two radish groups indicates a profound variation in their source-organ capacity. This phenotypic variance aligns with foundational map-based exploration in radishes conducted by Yu et al. 2016 [9]. The divergence in leaf surface texture and configuration, where CONRSG leaves present fewer lobes and a sparse trichome density, while BTRSG leaves display an intermediate lobe number and moderate trichome density, underlines the structural plasticity inherent to *Raphanus sativus* foliar development. These features are critical markers for cultivar identification and often correlate with physical microenvironments or defensive adaptations against biotic stress [10]. Beyond the foliar features, the taproot geometry reveals a distinct spatial partitioning of secondary growth tissues, exemplified by the narrow-triangular shape of CONRSG and the medium-triangular shape of BTRSG. These structural variations in shape were driven by differential cell division and expansion within the xylem and phloem parenchyma during the secondary thickening stage.

A striking physiological distinction between the genotypes was localized in the chemical profile of the root flesh, with BTRSG exhibiting high pungency and CONRSG exhibiting mild pungency. This organoleptic variation reflects a differential accumulation of sulfur-rich secondary metabolites, specifically 4-methylthio-3-butenyl glucosinolate (4MTB-GSL), which serves as the signature pungent driver in radishes upon enzymatic hydrolysis by myrosinase. In contrast to the highly divergent attributes, the monomorphic nature of traits such as an obtuse leaf apex, an entire margin, and white root skin and flesh across both groups indicates areas of high genetic conservation or fixed homozygous alleles. The lack of pigmentation in the taproots indicates an absence or structural downregulation of anthocyanin-promoting transcription factors in both populations [11]. Early establishment and germination performance were measured based on the seed germination pattern. The seed germination rate in the BTRSG group was significantly higher compared to the control (CONRSG), indicating that the treatment provided an effective physiological trigger during the earliest stages of crop establishment. This accelerated and enhanced germination process can be attributed to the activation of pre-germinative metabolic pathways within the seeds, a phenomenon corroborated by Kanjevac et al. 2022 [12]. For short-cycle root vegetables like radish, securing rapid and uniform seedling emergence under varying conditions was vital to maximizing eventual performance, as emphasized by Toscano et al. 2025 [13]. Following successful establishment, morphological parameters related to vegetative canopy growth in the BTRSG group showed prominent upgrades, including an increase in leaf number per plant, leaf width, and leaf fresh weight relative to the control. The notable widening and multiplication of leaves suggest the formation of a superior photosynthetic source architecture capable of capturing more light energy. This expansion of the vegetative apparatus closely aligns with structural improvements observed by Neofytou et al. 2024 [5], which demonstrated that target growth-promoting amendments fundamentally enhance leaf number and leaf fresh weight in radish. In this study, Spiritual Blessing (Biofield) Energy Treatment (The Trivedi Effect®) significantly improved germination capacity, which might be led to early establishment through stimulation of pregerminated metabolic pathways that corroborated with the Kanjevac et al. 2022. Moreover, SBET significantly improved the vegetative canopy in terms of more leaves and increased leaf width that ultimately enhanced the photosynthetic pathway supported by Neofytou et al. 2024. The physiological advantages gained from the improved canopy directly translated into below-ground development, where root length, root girth, and root weight per plant were significantly increased in the BTRSG group compared to the control (CONRSG).

Driven by these robust biometric enhancements, the final radish root yield exhibited a highly substantial increase over the control. This simultaneous expansion of root length and thickness highlights a highly balanced source-to-sink relationship, where the roots acted as efficient storage sinks for carbohydrates, a behavior extensively detailed by Raza et al. 2022 [3]. Ultimately, the concurrent acceleration of foliar area and below-ground mass highlights the success of the treatment in overriding standard growth limitations to maximize radish marketability, corresponding directly with findings described by Kaya, 2025 [14].

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CONCLUSION

The findings demonstrate that the SBET showed a highly significant, holistic stimulus on the crop's biological and agronomic performance, driving robust development from initial cellular establishment to final harvestable biomass. Ultimately, SBET serves as a powerful agricultural strategy to bridge the gap between early vegetative growth and high-density crop productivity, making it a highly viable method for maximizing sustainable root crop yields.

Abbreviations

SBET: spiritual blessing energy treatment; CONRSG: control radish group; BTRSG: blessing/biofield energy-treated radish group; SSP: single super phosphate; MOP: muriate of potash

Acknowledgement

The authors are grateful to Divine Connection Foundation for the assistance and support during the work.

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.

Funding

The authors declare that no funds, grants, or other support were received during the preparation of this manuscript.

REFERENCES

[1] Bhusal K, Paudel A, Bhatta B, Bista K, Sapkota S. Effects of different sources of fertilizers on growth and yield of radish (*Raphanus sativus* L.). Turkish Journal of Agriculture - Food Science and Technology, 2024;12(6):932–939. https://doi.org/10.24925/turjaf.v12i6.932-939.6636

[2] Kanjevac M, Jakovljević D, Todorović M, Stanković M, Ćurčić S, Bojović B. Improvement of germination and early growth of radish (*Raphanus sativus* L.) through modulation of seed metabolic processes. Plants, 2022;11(6):757. https://doi.org/10.3390/plants11060757

[3] Raza QU, Bashir MA, Rehim A, Ejaz R, Raza HMA, Shahzad U, Ahmed F, Geng Y. Biostimulants induce positive changes in the radish morpho-physiology and yield. Frontiers in Plant Science, 2022;13:950393. https://doi.org/10.3389/fpls.2022.950393

[4] Jin D, Lu Z, Song X, Ahammed GJ, Yan Y, Chen S. Improvement of yield and quality properties of radish by the organic fertilizer application combined with the reduction of chemical fertilizer. Agronomy, 2024;14(8):1847. https://doi.org/10.3390/agronomy14081847

[5] Neofytou G, Chrysargyris A, Antoniou MG, Tzortzakis N. Radish and spinach seedling production and early growth in response to struvite use as a phosphorus source. Plants (Basel), 2024;13(20):2917. https://doi.org/10.3390/plants13202917

[6] Branton A, Gaikwad TB, Phutankar NR, Kadam VD, Mondal S, Jana S. Measuring the phenological response and yield of cucumbers to distant spiritual blessing energy treatment. BioMed Research Journal, 2026;9(1):875-874.

[7] Branton A, Trivedi MK, Trivedi D, Phutankar NR, Gaikwad TB, Kadam VD, Mondal S, Jana S. Blessing (biofield) energy treatment (BET) for superior growth and yield of bitter gourd. International Journal of Agricultural Research and Review, International Journal of Agricultural Research and Review, 2026;14(2):20-26. https://doi.org/10.54978

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[8] Richer-de-Forges AC, Arrouays D, Chen S, Dobarco MR, Libohova Z, Roudier P, Minasny B, Bourennane H. Hand-feel soil texture and particle-size distribution in central France. Relationships and implications, CATENA, 2022;213:106155. https://doi.org/10.1016/j.catena.2022.106155

[9] Yu X, Choi SR, Dhandapani V, Rameneni JJ, Li X, Pang W, Lee JY, Lim YP. Quantitative trait loci for morphological traits and their association with functional genes in *Raphanus sativus*. Frontier in Plant Science, 2016;7:255. http://dx.doi.org/10.3389/fpls.2016.00255

[10] Wei-Ling Chena, Wen-Ju Yang, Hsiao-Feng Lo, Der-Ming Yeh. Physiology, anatomy, and cell membrane thermostability selection of leafy radish (*Raphanus sativus* var. oleiformis Pers.) with different tolerance under heat stress. Scientia Horticulturae, 2014;179:367–375. http://dx.doi.org/10.1016/j.scienta.2014.10.003

[11] Tongjin Liu, Jinglei Wang, Chunhui Wu, Youjun Zhang, Xiaohui Zhang, Xiaoman Li, Haiping Wang, Jiangping Song, Xixiang Li. Combined QTL-Seq and traditional linkage analysis to identify candidate genes for purple skin of radish fleshy taproots. Frontiers in Genetics, 2019;10:Article 808. http://dx.doi.org/10.3389/fgene.2019.00808

[12] Kanjevac M, Jakovljević D, Todorović M, Stanković M, Ćurčić S, Bojović B. Improvement of germination and early growth of radish (*Raphanus sativus* L.) through modulation of seed metabolic processes. Plants, 2022;11(6):757. https://doi.org/10.3390/plants11060757

[13] Toscano S, Romano D, Cafaro V, Patanè C. Annual garden rocket and radish as microgreens: Seed germination response to thermal and salt stress. Agronomy, 2025;15(2):361. https://doi.org/10.3390/agronomy15020361

[14] Kaya G. A plant-derived biostimulant Aminolom Enzimatico® application stimulates chlorophyll content, electrolyte leakage, stomata density and root yield of radishes under salinity stress. PeerJ, 2025;13:e18804. https://doi.org/10.7717/peerj.18804