Influence of Pyramidal Energy and Lunar Days on Germination of Seeds

Dissertation submitted by

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SWĀMĪ VIVEKĀNANDA YOGĀ ANUSANADHĀNA SAMASTHĀNA (S-VYASA)

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CERTIFICATE

This is to certify that POOJA SONI is submitting this Dissertation on "INFLUENCE OF PYRAMIDAL ENERGY AND LUNAR DAYS ON GERMINATION OF SEEDS" in partial fulfillment of the requirement for the Masters of Science (Yoga Therapy) registered in $SW\bar{A}M\bar{I}$ *VIVEKĀNANDA YOGĀ ANUSANADHĀNA SAMASTHĀNA* (S-VYASA UNIVERSITY), BENGALURU and this is a record of the work carried out by her in this institution.

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Place: Bangalore

DECLARATION

I, hereby declare that this study was conducted by me at Swāmī Vivekānanda Yogā

Anusanadhāna Samasthāna (S-VYASA), Bangalore, under the guidance of Dr. Itagi Ravi

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I also declare that the subject matter of my dissertation entitled below has not previously formed

the basis of the award of any degree, diploma, associate ship, fellowship or similar titles.

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Bangalore POOJA SONI

Date: (Candidate)

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STANDARD INTERNATIONAL TRANSLITERATION CODE USED TO TRANSLITERATE SAMSKRTA WORDS

अ	a	घ	gha	Ч	pa
आ	ā	ङ	'nа	फ	pha
इ	i	च	ca	ब	ba
ई	ī	छ	cha	भ	bha
उ	u	ज	ja	म	ma
ऊ	ū	झ	jha	य	ya
ૠ	ţ	ञ	ña	₹	ra
ૠ	<u>r</u>	5	ța	ਲ	la
ए	e	ठ	ṭha	व	va
ऐ	ai	ड	ḍа	श	śa
ओ औ	0	ढ	ḍha	ष	șa
औ	au	ण	ņa	स	sa
अं	aṁ	त	ta	ह	ha
अः	aḥ	थ	tha	क्ष	kṣa
क	ka	द	da	त्र	tra
ख	kha	घ	dha	ॹ	jña
ग	ga	न	na		

ABSTRACT

Background

Pyramid is in conical triangular shape that is directly connected with the energy. Energy gained from the conical triangle through cosmos and from underground.

Aim

The purpose of the present study is to assess the effect of pyramids and lunar days on the germination of seeds.

Objectives

- a. To study the effect of pyramids on the emergence, radical length, fresh weight and oven dry weight.
- b. To study the effect of size of pyramids on the emergence, radical length, fresh weight and oven dry weight.
- c. To study the effect of materials of pyramids on the emergence, radical length, fresh weight and oven dry weight.
- d. To study the effect of lunar days on the emergence, radical length, fresh weight and oven dry weight.

Materials and method

Four types of pyramids were used for the treatment in this experiment, plywood small pyramid (PSP) of size with 13.5 cm \times 13.5 cm \times 10.5 cm, plywood big pyramid (PBP) of size with 20 cm \times 20 cm \times 15.5 cm, copper small pyramid (CSP) of size with 13.5 cm \times 13.5 cm \times 10.5 cm and copper big pyramid (CBP) of size with 20 cm \times 20 cm \times 15.5 cm. Two type of seeds are used they are fenugreek and green gram seeds were collected from recognized agriculture institute.

All samples were placed in same room of well ventilation and maintained uniformity in moisture. Good seeds were selected randomly with sample size of 600 numbers. There was fifteen replications with each replication have 40 seeds.

Intervention was of two types of pyramid that was plywood pyramid and copper pyramid with two different sizes ($20 \text{ cm} \times 20 \text{ cm} \times 15.5 \text{ cm}$ and $13.5 \text{ cm} \times 13.5 \text{ cm} \times 10.5 \text{ cm}$). Weight of each replication seeds that contain 40 seeds was taken and then cleaned the seeds with distilled water to remove foreign matter. After cleaning soaked the seeds for 10 hours by using 30 ml distilled water. Then removed the soaked seeds kept in petri dish with sandwiched between wet filter paper and covered with respective pyramids for treatment samples and control sample was kept in open air. Pyramids are oriented towards magnetic N-S direction. Has put distilled water morning and evening to maintain wetness of a filter paper and allowing samples to germinate for one day. After one day germinated seeds were counted, and measured radical length of each germinated seeds by using measuring scale, then measured weight of fresh seeds with balance of accuracy of 0.0001 gm. After measuring of fresh weight kept the seeds in hot air oven for six hours at 60° c and then measured weight of oven dry seeds. Atmospheric parameters temperature and humidity were recorded 6:00 to 6:30 am, 12 noon and 6 pm and noted weather condition on each day.

To study the effect of lunar days sample was soaked at sunrise time on each *Tithī* of *Phālguṇaḥ Māsa* for fenugreek seeds and for *Caitra Māsa* for green gram seeds and germinated for one day for each treatment of pyramid and for control sample.

Result

1 Effect of Pyramids on Germination of Fenugreek Seeds

1.1 Effect of Pyramids

Control (99.83%) and PBP had maximum % of germination compared to other samples and all treatment samples except CSP sample had more mean radical length compared to control sample and in this PBP sample had exponential increment (<0.001), PSP sample had higher significant (<0.01) and CBP sample had significant (<0.05) increment. All treatment samples had more fresh weight and oven dry weight of germinated samples compared to control sample and in this CBP sample had maximum fresh weight 26.69 gm and PSP had maximum oven dry weight 7.97 gm.

1.2 Effect of Material of Pyramids

Plywood pyramid sample had maximum % of germination (99.83) compared to copper pyramid samples (99.67) and all plywood pyramid had more mean radical length (1.11 cm) compared to copper pyramid sample (1.05 cm). Copper pyramid sample had more fresh weight (8.89 gm) of germinated samples compared to plywood pyramid sample (8.81gm) and plywood pyramid sample had more oven dry weight (7.92 gm) of germinated samples compared to copper pyramid sample (7.84 gm).

1.3 Effect of Size of Pyramids

PBP had maximum % of germination (99.83) compared to PSP (99.00) and CBP had maximum % of germination (99.67) compared to CSP (99.50). PBP had more mean radical length (1.11 cm) compared to PSP (1.05 cm) and CBP had more mean radical length (1.05 cm) compared to CSP (0.97 cm). PBP had more fresh weight (25.53 gm) of germinated samples compared to PSP (24.50 cm) and CBP had more fresh weight (26.69 gm) of germinated samples compared to CSP (25.16 cm). PSP had more oven dry weight (7.97 gm) of germinated samples compared to PBP (7.92 gm) and CSP had more oven dry weight (7.85 gm) of germinated samples compared to CBP (7.84 gm).

2 Effect of Lunar Days on Germination of Fenugreek Seeds

Control (1.61 gm), PSP (1.93 gm) and PBP (1.87 gm) samples had their maximum fresh weight of germinated seeds on $P\bar{u}rnim\bar{a}$ and CSP (1.88 gm) & CBP (2.03 gm) samples had their maximum fresh weight on $Pa\bar{n}cam\bar{\imath}$ and $Dv\bar{a}das\bar{\imath}$ respectively at $Sukla\ Pakṣaḥ$. All samples had their maximum oven dry weight of germinated seeds on around $Saptam\bar{\imath}$ at $Sukla\ Pakṣaḥ$. At $Kṛṣṇa\ Pakṣaḥ$ all samples had their maximum fresh weight at between Pratipat to $Aṣṭam\bar{\imath}$ and they have maximum oven dry weight between $Saptam\bar{\imath}2$ to $Caturadas\bar{\imath}$. Results show that control sample (1.27 cm) on $Dasam\bar{\imath}$, PSP sample (1.22 cm) on $Dv\bar{\imath}adas\bar{\imath}$, PBP sample (1.36 cm) on $P\bar{u}rnim\bar{\imath}$, CSP sample (1.25 cm) on $Aṣṭam\bar{\imath}$, CBP sample (1.06 cm) on $Navam\bar{\imath}$ have maximum mean radical length at $Sukla\ Pakṣaḥ$ and at $Kṛṣṇa\ Pakṣaḥ$ control sample (1.37 cm), PSP sample (1.34 cm), PBP sample (1.44 cm) and CSP sample (1.27 cm) on $Navam\bar{\imath}$ and CBP sample (1.21

cm) on *Saptamī1* have more mean radical length. At average all samples had shown 100% germination on all days.

3 Effect of Pyramid on Germination of Green Gram Seeds

3.1 Effect of Pyramids

All pyramid samples had more % of germination in compared to control samples, PBP (99.5%) and CBP had maximum % of germination compared to other samples and all treatment samples had more mean radical length compared to control sample and all sample had exponential increment (<0.001). All treatment samples had more fresh weight compared to control sample and in this CBP sample had maximum fresh weight (82.06 gm) and control had more oven dry weight (23.12 gm) of germinated samples compared to all treatment.

3.2 Effect of Material of Pyramids

Both PBP (99.5%) and CBP (99.5%) samples show maximum % of germination. CSP (2.34 cm) & CBP (2.47 cm) had more mean radical length compared to PSP (2.26 cm) & PBP (2.47 cm). CSP (80.04 gm) & CBP (82.06 gm) had more fresh weight of germinated samples compared to PSP (76.21 gm) & PBP (78.77 gm). PSP (20.97 gm) & PBP (25.03 gm) had more oven dry weight of germinated samples compared to CSP (22.59 gm) & CBP (22.63 gm).

3.3 Effect of Size of Pyramids

PBP (99.5) & CBP (99.5) had maximum % of germination compared to PSP (99) & CSP (99) and PBP (2.45 cm) & CBP (2.47 cm) had more mean radical length compared to PSP (2.34 cm) & CSP (2.47 cm) and PBP (78.77 gm) & CBP (82.06 gm) had more fresh weight compared to PSP (76.21 gm) & CSP (80.04 gm). PBP (22.88 gm) & CBP (22.63 gm) had more oven dry weight compared to PSP (22.62 gm) & CSP (22.59 gm).

4 Effect of Lunar Days on Germination of Green Gram Seeds

PSP (6.79 gm), PBP (7.09 gm), CSP (7.49 gm) and CBP (7.74 gm) samples had maximum fresh weight of germinated seeds on lunar day $Trt\bar{t}y\bar{a}$ and control sample (5.72 gm) had maximum fresh weight on $Caturth\bar{t}$ at $Sukla\ Paksah$. PSP (1.59 gm) and PBP (1.59 gm) samples had

maximum oven dry weight on Ekādaśī and control sample (1.61 gm) on Caturadaśī, CSP (1.55 gm) sample had maximum oven dry weight on Tṛtīyā and CBP (1.57 gm) on Caturadaśī at Śukla Pakṣaḥ. At Kṛṣṇa Pakṣaḥ control sample (6.03 gm) had maximum fresh weight on Daśamī, PSP (6.63 gm) and PBP (7.38 gm) samples had on Navamī, CSP (7.01 gm) and CBP (7.07 gm) samples on Dvādaśī. All samples had maximum oven dry weight on Dvitīyā. Results show that samples C (2.02 cm) on Caturthī, PSP (2.65 cm) on Caturadaśī, PBP (3.60 cm) on Navamī, CSP (2.91 cm) on Dvādaśī and CBP (2.89 cm) on Pratipat and Dvitīyā had maximum mean radical length at Śukla Pakṣaḥ and samples C (2.74 cm) and PBP (3.03 cm) on Dvādaśī, PSP (2.62 cm) on Trayodaśī, CSP (2.77 cm) on Dvādaśī and CBP (2.94 cm) on Amāvasyā had maximum radical length at Kṛṣṇa Pakṣaḥ.

Conclusion

1 Effect of Pyramid on Germination of Fenugreek Seeds

1.1 Effect of Pyramid

The present study on variables of germination of fenugreek seeds found that pyramid is more effective than control on % of germination, mean radical length, fresh weight and oven dry weight.

1.2 Effect of Materials

The present study found that Compared to copper pyramid, plywood pyramid showed more effctive on % of germination, radical length and oven dry weight but not in fresh weight.

1.3 Effect of Size

The study showed that compared to plywood small pyramid & copper small pyramid, plywood big pyramid & copper big pyramid showed more effective on % of germination, mean radical length and fresh weight but not in oven dry weight.

2 Effect of Lunar Days on Germination of Fenugreek Seeds

Variations in results of variables of germination on lunar days is due to the change in geo magnetic filed and atmospheric weather. Second phase of Śukla Pakṣaḥ had more influence on the germination of seeds than Kṛṣṇa Pakṣaḥ.

3 Effect of Pyramid on Germination of Green Gram Seeds

3.1 Effect of pyramid

The present study on variables of germination of green gram seeds found that pyramid is more effective than control on % of germination, mean radical length, fresh weight but not on oven dry weight.

3.2 Effect of materials

The investigation had found that copper pyramid had more influence on mean radical length and fresh weight not on oven dry weight.

3.3 Effect of size

The present study showed that big size of plywood and copper pyramids had more effective on germination of seeds compared to small size of plywood and copper pyramids.

4 Effect of Lunar Days on Germination of Green Gram Seeds

In this study variations in variables of germination on lunar days on green gram seeds is due to the change in geo magnetic filed and atmospheric weather. First half of $Sukla\ Pakṣaḥ$ and second half of $Kṛṣṇa\ Pakṣaḥ$ was more effect on germination of seeds

Keywords

Plywood Pyramid, Copper Pyramid, Germination, Fresh Weight, Oven Dry Weight, Radical Length, Śukla Pakṣaḥ, Kṛṣṇa Pakṣaḥ.

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