

Germination of Seeds with Influence of Subtle Energy of Śrīyantrās and Lunar Days

Dissertation submitted by

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Under the Guidance of

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Towards partial fulfillment of

Masters of Science (Yoga Therapy)

Submitted to



**SWĀMĪ VIVEKĀNANDA YOGĀ ANUSANADHĀNA SAMASTHĀNA
(S-VYASA)**

(A university, established under section 3 of the UGC Act, 1956 vide Notification No. F.9-45/2001-U.3 dated 8-5-2001 of government of India).

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CERTIFICATE

This is to certify that RAVI KUMAR MANDAL is submitting this Dissertation on **“GERMINATION OF SEEDS WITH INFLUENCE OF SUBTLE ENERGY OF ŚRĪYANTRĀS AND LUNAR DAYS”** in partial fulfillment of the requirement for the Masters of Science (Yoga Therapy) registered in *SWĀMĪ VIVEKĀNANDA YOGĀ ANUSANADHĀNA SAMASTHĀNA (S-VYASA UNIVERSITY)*, BENGALURU and this is a record of the work carried out by him in this institution.

Date:
Place: Bangalore

Guide: Itagi Ravi Kumar

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 Kumar, *Swāmī Vivekānanda Yogā* University Bangalore.

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.

Date:
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Ravi Kumar Mandal
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A C K N O W L E D G E M E N T

I could never complete my work alone. In order to write the report and the project, I relied on the contribution of many other people.

I express my profound gratitude to my guide, Dr. Itagi Ravi Kumar for his encouragement and guidance. His contribution in my development cannot be expressed in words.

I extend my thanks to my course coordinator Miss Padmashree, all faculty and all my friends, those who helped me in this work in one way or others.

I am indebted to my parents for their inspiration, love and support.

I will be always grateful to my university *Swāmī Vivekānanda Yogā Anusanadhāna Samasthāna* (S-VYASA) for its support in promoting my career.

Finally I thank that unseen Divine without whose wish, this work wouldn't have been possible.

Bangalore

Date:

Ravi Kumar Mandal

(Candidate)

**STANDARD INTERNATIONAL TRANSLITERATION CODE USED TO
TRANSLITERATE *SAMSKR̥TA* WORDS**

अ	a	घ	gha	प	pa
आ	ā	ङ	ṅa	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
ऋ	ṛ	ञ	ña	र	ra
ॠ	ṝ	ट	ṭa	ल	la
ए	e	ठ	ṭha	व	va
ऐ	ai	ड	ḍa	श	śa
ओ	o	ढ	ḍha	ष	ṣa
औ	au	ण	ṇa	स	sa
अं	aṁ	त	ta	ह	ha
अः	aḥ	थ	tha	क्ष	kṣa
क	ka	द्	da	त्र	tra
ख	kha	ध	dha	ज्ञ	jña
ग	ga	न	na		

ABSTRACT

Background

Yantra means an instrument, apparatus, an object or a spiritual diagram for *Pūjā* or *Upāsana* to attain the *Siddhi* and to attain desires.

Aim

The present study was designed to see the influence of *Śrīyantrās* and lunar days on the germination of seeds.

Objectives

On germination of seeds

- a. Effect of *Śrīyantrās*.
- b. Effect of size of *Śrīyantrās*.
- c. Effect of materials of *Śrīyantrās*.
- d. Effect of lunar days.

Material and Method

Following four *Śrīyantrās* were used for the treatment in this experiment. a. Paper small *Śrīyantrās* (PSY) (15 cm × 15 cm), b. Paper big *Śrīyantrās* (PBY) (23 cm × 23 cm), c. *Pañca Loha* small *Śrīyantra* (MSY) (15 cm × 15 cm), d. *Pañca Loha* big *Śrīyantra* (MSY) (23 cm × 23 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, good seeds were selected randomly with measuring of dry weight of size of 600 number seeds. There was 15 replication with 40 seeds each.

Weight of each trial seeds that contains 40 seeds was taken then cleaned the seeds with distilled water to remove toxic matter. After cleaning soaked the seeds for 10 hours by using 30 ml

distilled water. Then removed the soaked seeds and kept in petri dish with sandwiched between fresh filter paper and covered with respective *Śrīyantra* for the treatment samples and kept at open air for control sample. *Śrīyantra* are orienting towards magnetic N-S direction. Then put distilled water at morning and evening to maintain wetness of a filter paper and allowing the 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 measuring weight of fresh seeds by balance of accuracy of 0.0001gm. After measuring fresh weight kept the seeds in hot air oven for 6 hours at 60°C and then measured weight of oven dry seeds.

To study the effect of lunar days samples are soaked at sunrise time on each *Tithī* of *Phālgunah Māsa* & *Caitra Māsa* for 10 hours, and germinated for next one day for each treatment of *Śrīyantra* and for control sample.

Result

1. Effect of *Śrīyantras* on Germination of Green Gram Seeds

1.1 Effect of *Śrīyantras*

Control sample had maximum percentage of germination (99.67%) compared to all other *Śrīyantra* samples. All *Śrīyantra* samples had more mean radical length compared to control sample and these increments are highest significant (<0.001). In this MBY sample had maximum mean value of 1.81 cm. All treatment samples had more fresh weight compared to control sample and in this MBY sample had maximum (88.82 gm) fresh weight. Control sample had maximum (23.35 gm) oven dry weight.

1.2 Effect of Material of *Śrīyantra*

MBY sample had % of germinated seeds 99.33 and PBY sample had 98.33, MBY sample had 1.81 cm mean radical length and PBY sample had 1.52 cm, MBY sample had fresh weight 88.82 gm and PBY sample had 83.35 gm, MBY sample had oven dry weight 23.35 gm and PBY sample had 23.42 gm.

1.3 Effect of Size of Śrīyantra

MBY sample had radical length 1.81cm and MSY sample had 1.76 cm, MBY sample had fresh weight 88.26 gm and MSY sample had 88.82 gm and MBY sample had oven dry weight 23.35 gm and MSY sample had 23.30 gm.

2 Effect of Lunar Days on Germination of Green Gram Seeds

There is variation in fresh weight and oven dry weight of germinated seeds in all types of samples at both Śukla Pakṣa and Kṛṣṇa Pakṣaḥ of Phālgunaḥ Māsa due to lunar effects. At Śukla Pakṣaḥ samples control (5.7 gm), PSY (6.16 gm), PBY (6.21 gm) & MBY (6.08 gm) had maximum fresh weight of germinated seeds on Pūrṇimā and sample MSY (6.24 gm) had on Daśamī. At Kṛṣṇa Pakṣaḥ control sample (6.32 gm) on Pratīpat, PSY (6.58 gm) on Caturadaśī, PBY (6.88 gm), MSY (7.24 gm) and MBY (7.77 gm) on Ekādaśī had their maximum fresh weight of germinated seeds. Maximum oven dry weight of germinated seeds of control sample (1.65 gm) and PSY (1.64 gm) on Pratīpat, PBY (1.6 gm) on Dvītiyā and Caturthī, MSY (1.61 gm) on Caturthī and MBY sample (1.65 gm) on Trītiyā at Śukla Pakṣaḥ. At Kṛṣṇa Pakṣaḥ control sample (1.59 gm) on Pratīpat and Dvītiyā, PSY (1.58 gm) on Dvītiyā and Pañcamī, PBY (1.61 gm) on Ṣaṣṭhi, MSY (1.58 gm) on Trītiyā and MBY (1.56 gm) on Dvītiyā and Saptamī2 had their maximum oven dry weight of germinated seeds. At Śukla Pakṣaḥ control sample (1.47 cm) and PSY (2.08 cm) on Dvādaśī, PBY (2.02 cm), MSY (2.18 cm) and MBY (2.25 cm) on Pūrṇimā had their maximum mean radical length. At Kṛṣṇa Pakṣaḥ control sample (1.68 cm), PSY (2.15 cm) and PBY (2.51 cm) on Saptamī1, MSY (2.76 cm) on Ṣaṣṭhi and MBY (3.10 cm) had on Saptamī2 had their maximum mean radical length. Here control sample had the effect of only of lunar days and samples PSY, PBY, MSY and MBY samples had effect of lunar days and their respective Śrīyantra on the germination of their seeds.

3 Effect of Śrīyantra on Germination of Fenugreek Seeds

3.1 Effect of Śrīyantras

PBY sample had maximum percentage of germination (99.83 %) compared to all other treatment samples. PBY sample had maximum radical length (0.78 cm) compared to other sample and this increments is higher significant compared to control sample. In this MBY sample had maximum fresh weight (24.10 gm) and all treatment samples had more fresh weight compared to control sample. PSY sample had maximum (8.08 gm) oven dry weight.

3.2 Effect of Material of Śrīyantras

PBY sample had % of germinated seeds (99.83 %) and MBY sample had (99.17 %), PBY sample had (0.78 cm) mean radical length and MBY sample had (0.69 cm), PBY sample had fresh weight (21.32 gm) and MBY sample had (24.10 gm), and MBY sample had oven dry weight (8.00 gm) and PBY sample had (8.00 gm).

3.3 Effect of Size of Śrīyantra

PBY sample had percentage of germination (99.83 %) and PSY sample had (99.17 %), PBY sample had mean radical length (0.78 cm) and PSY sample had (0.75 cm), MBY sample had fresh weight (24.10 gm) and MSY sample had (22.08 gm) and PBY sample had oven dry weight (8.00 gm) and PSY sample had (8.08 gm).

4 Effect of Lunar Days on Germination of Fenugreek Seeds

At *Śukla Pakṣaḥ* control (1.73 gm), PSY (1.94 gm), PBY (1.89 gm) and MBY (2.03 gm) samples had maximum fresh weight of germinated seeds on *Tṛtīyā*, and MSY (2.08 gm) on *Trayodaśī*. At *Kṛṣṇa Pakṣaḥ* control sample (1.18 gm) on *Navamī*, PSY (2.02 gm), PBY (2.16 gm) and MSY (2.53 gm) on *Ṣaṣṭhi* and MBY (2.12 gm) on *Aṣṭamī* had their maximum fresh weight of germinated seeds. Maximum oven dry weight of germinated seeds of PBY (0.56 gm) on *Aṣṭamī* & *Ekādaśī*, MSY (0.56 gm) on *Aṣṭamī* and MBY sample (0.58 gm) on *Caturthī* at *Śukla Pakṣaḥ*. At *Kṛṣṇa Pakṣaḥ* PSY (0.62 gm), PBY (0.62 gm), MSY (0.58 gm) and MBY(0.61 gm)

samples had maximum oven dry weight on *Ṣaṣṭhi*. At *Śukla Pakṣaḥ* control sample (0.88 cm) and PSY (1.03 cm) on *Dvādaśī*, PBY (0.95 cm) and MBY (0.80 cm) on *Ekādaśī* and MSY (0.88 cm) on *Pañcamī* had their maximum mean radical length. Compared to control sample PSY had highest increment (<0.001) on *Pratīpat*, *Dvītīyā* and *Navamī* and significant on *Ekādaśī*. PBY sample had higher significant (<0.01) in mean radicals on *Pratīpat*, *Dvītīyā*, *Navamī* and *Ekādaśī*. MSY sample had exponential increment (<0.001) on *Dvādaśī*, higher significant (<0.01) in mean radicals on *Pratīpat*, *Dvītīyā*, and significant (<0.05) on *Pañcamī*. MBY sample had highest increment (<0.001) in mean radicals on *Pratīpat* and *Dvītīyā*, higher significant (<0.01) on *Ekādaśī* and significant increment (<0.05) on *Ṣaṣṭhi* and *Saptamī* at *Śukla Pakṣaḥ*. At *Kṛṣṇa Pakṣaḥ* control sample (1.02 cm) and PBY sample on *Dvītīyā*, PBY (1.10 cm) and MBY (2.76 cm) on *Amāvāsyā* and MSY (0.80 cm) on *Caturadaśī* had their maximum mean radical length. Compared to control sample PSY had highest increment (<0.001) on *Ṣaṣṭhi* and significant on *Dvādaśī* and *Caturadaśī*. PBY sample had higher significant (<0.01) in mean radicals on *Ṣaṣṭhi* and significant on *Ekādaśī*. MSY sample had highest increment (<0.001) on *Dvītīyā* and significant (<0.05) on *Tṛtīyā* and *Caturthī*. MBY sample had highest increment (<0.001) in mean radicals on *Dvītīyā* and *Caturadaśī* at *Kṛṣṇa Pakṣaḥ*.

Conclusion

1 Effect of *Śrīyantras* on Germination of Green Gram Seeds

1.1 Effect of *Śrīyantra*

The present study showed *Śrīyantra* was more effective than control on mean radical length and fresh weight on green gram seeds but not on % of germination and oven dry weight.

1.2 Effect of Material of Śrīyantra

The investigation found that *Pañca Loha Śrīyantra* was more effective on mean radical length and fresh weight than paper *Śrīyantra*. Paper *Śrīyantra* is more effective on oven dry weight than *Pañca Loha Śrīyantra*.

1.3 Effect of Size of Śrīyantra

Smaller size Paper *Śrīyantra* was more effective on % of germination, mean radical length and oven dry weight and bigger size Paper *Śrīyantra* was more effective on fresh weight. Bigger size *Pañca Loha Śrīyantra* was more effective on mean radical length, fresh weight and oven dry weight but size of *Pañca Loha Śrīyantra* was not effective on % of germination.

2 Effect of Lunar Days Germination of Green Gram Seeds

The present study found that at *Śukla Pakṣaḥ* the last phase on lunar day *Pūrṇimā* was more effective, at *Kṛṣṇa Pakṣaḥ* at middle phase, the lunar day *Saptamī* was more effective and at overall *Kṛṣṇa Pakṣaḥ* had more influence than *Śukla Pakṣaḥ* on the germination of green gram seeds.

3 Effect of Śrīyantra on Germination of Fenugreek Seeds

3.1 Effect of Śrīyantra

The present study showed *Śrīyantra* was more effective than control on % of germination, mean radical length, fresh weight and oven dry weight on fenugreek seeds.

3.2 Effect of Material of Śrīyantra

The present study showed that Paper *Śrīyantra* was more effective on % of germination, mean radical length and oven dry weight than *Pañca Loha Śrīyantra*. *Pañca Loha Śrīyantra* was more effective on fresh weight compared to Paper *Śrīyantra*.

3.3 Effect of Size of Śrīyantra

The present study showed that bigger size Paper Śrīyantra was more effective on % of germination, mean radical length and fresh weight but smaller size Paper Śrīyantra was more effect on oven dry weight. Bigger size Pañca Loha Śrīyantra was more effective on mean radical length and fresh weight but smaller size Pañca Loha Śrīyantra was more effective on % of germination. Bigger size of Pañca Loha Śrīyantra had no influence on oven dry weight.

4 Effect of Lunar Days on Germination of fenugreek Seeds

The investigation found that at Śukla Pakṣaḥ Pratīpat and Dvītīyā at first phase was more effective, at Kṛṣṇa Pakṣaḥ Śaṣṭhi at middle phase was more effective.

Keywords

Pañca Loha Śrīyantra, Paper Śrīyantra, Lunar Day, Śukla Pakṣaḥ, Kṛṣṇa Pakṣaḥ, Germination, Radical Length, Fresh Weight, Oven Dry Weight.

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