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Standardization of Extraction Procedure of *Giloy Satva* (Aqueous extract of Tinospora cordifolia)

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Abstract

Giloy Satva is a highly prescribed formulation in conditions such as *Jwara* (fever) and other *Pitta* predominance conditions. The aim of this study is to evaluate the ideal diameter of the *Giloy* stem which should be used to obtained the more yield. The present study has concluded that the minimum yield of *Giloy Satva* was 0.92 % is obtained from maximum Diameter of the stem (Batch-4) and maximum yield of *Satva* 2.32 % was obtained from medium Diameter of the stem (Batch-2).

KEYWORDS: *Giloy Satva*, standard manufacturing procedure, *Giloy* sat, *Giloy Satva*.

1. Introduction:

The word "*Giloy Satva*" is first time mentioned in "*Rasendra mangalam*"[1] in context of "*Panchamruta Rasa*." due to its effectiveness it is incorporated in the various preparations like *Panchamruta Rasa*. *Giloy Satva* preparation has been mentioned in *Yoga Ratnakar*[2], *Siddhayoga Sangraha*[3], *Dravyaguna vigyana*, *Rasa Yoga Sagar*[4] etc.. All these texts have mentioned different methods of preparation. *Giloy Satva* is a highly prescribed formulation in conditions such as *Jwara* (fever) and other *Pitta* predominance conditions.

2. Aims and Objectives:

The aim of this study is to evaluate the ideal diameter of the *Giloy* stem which should be used to obtained the more yield.

3. Materials and Methods:

3.1 Procurement of raw material:

The raw drug, Fresh *Giloy* (Tinospora cordifolia) stem spreading over *Nimba* tree (*Azadirachta indica*) was procured on 2nd November 2022 from the Botanical garden of MIAER Mandsaur. This raw drug was analyzed before preparing *Giloy Satva* and having dark brown in colour with sufficient covering.

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Pharmaceutical structure was prepared for maintaining Standard Manufacturer Process during pharmaceutical study. Total 4 batches of *Giloy Satva* were prepared by adopting classical method.

3.2 Structure of Batches

According diameter of stem following four batches was designed for study -

Batch A- Consist of *Giloy* stem (3kg) of 1.0-1.5 cm diameter.

Batch B- Consist of *Giloy* stem (3kg) of 1.5-2.0 cm diameter.

Batch C- Consist of *Giloy* stem (3kg) of 2.0-2.5 cm diameter.

Batch D- Consist of *Giloy* stem (3kg) of 2.5-3.0 cm diameter.

3.3 Method of preparation[5]- The main pharmaceutical steps involved are carried out as follows-

Different diameter's *Giloy* stem was collected according four batches. The physical impurities like dust; foreign particles etc. were removed and also washed carefully with R.O. water. This process was done and repeat for three times. Stem was cut into pieces of 2-4 cm and crushed completely to convert into sliminess pulp. This paste was further mixed with 4 times of R.O. water in stainless vessel and kept for soaking overnight (24 hours). Next morning this pulp was macerated throughout in water for about 1 hour. It was clarified slowly through a clean 4 folded cotton cloth. This Clarified juice (liquid) was kept aside undisturbed for 6 hours for settlement. The supernatant juice (liquid) was decanted cautiously heavy sediments, which was sediment at the bottom of pot, then it is shifted into other vessel and air dried under running fan. After dried it was collected and stored in airtight box.

4 OBSERVATIONS AND DISCUSSION

According to the A.F.I. '*Satva*' is aqueous extractable solid matter collected from herbal Plant. The herbal extract is a good concept in providing some degree of standardization to the herbal medicine. As the marker compound of herbal origin drug varies geographically and seasonally, there is a need to have very low in quantity of active principle or marker compound in the extract for efficacy. One of the advantages to use of herbal extracts for reducing the dose and also has more shelf life or stability and increase the bioavailability.

The stickiness of the pulp was reduced almost just only 1.5 hour's maceration. The colour of potable water (during maceration) was turned turbid. After straining with four folded cloth, the colour of liquid was greenish brown. The final product's colour was pale white in batch 1 and 2 but it was whiter in batch 3 and 4 but not clear white.

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Table 1: Final observation of assessment criteria for Giloy Satva-

S.N.	Assessment Parameters	BATCH 1	BATCH 2	BATCH 3	BATCH 4
1.	Fresh Guduchi stem(kg)	3kg	3kg	3kg	3kg
2.	Diameter of stem (cm	1.0-1.5 cm	1.5-2 cm	2-2.5 cm	2.5-3 cm
3.	Potable water's quantity (lits)	12	12	12	12
4.	Duration for soaking(hrs)	24	24	24	24
5.	Total time taken during maceration (hrs)	1.5	1.5	1.5	1.5
6.	Total time taken for sedimentation(hrs)	6	6	6	6
7.	Total time taken for drying(hrs)	4.5	4.5	4.5	4.5
8.	Total yield(gm)	38.1	69.6	63.6	27.6
9.	% yield	1.27 %	2.32 %	2.12 %	0.92%

Table 2: Organoleptic characteristics of Guduchi Satva

S. No.	Assessment Parameters	Batch 1	Batch 2	Batch 4	Batch 4
i.	Taste (Rasa)	Slightly Bitter	Slightly Bitter	Slightly Bitter	Slightly Bitter
ii.	Colour[6] (Roop)	Pale white	Pale white	white like conch shell (Shankhanibha)	white like conch shell (Shankhanibha)
iii.	Touch (Sparsh)	Smooth-amorphous	Smooth-amorphous	Smooth-amorphous	Smooth-amorphous
iv.	Smell (Gandh)	Not specific	Not specific	Not specific	Not specific

5. Results and Conclusion:

The present study has concluded that the minimum yield of *Giloy Satva* was 0.92 % obtained from maximum size of the stem (Batch-4) and maximum yield of *Satva* 2.32 % was obtained from medium Diameter of the stem (Batch-2). Final conclusion is that lowest (Less than 1.5 cm) and highest diameter (greater than 2.5cm) of *Giloy* stem have less yield although medium size (1.5 to 2.5 cm) have good yield of *Giloy Satva*.

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Fig.1- *Giloy* stem pieces

Fig.2- Shoked *Giloy* pieces

Fig.3- Allowed for sedimentation

Fig.4- Scraping of white sedimentation

Fig.5 – Final Product of Batch-1

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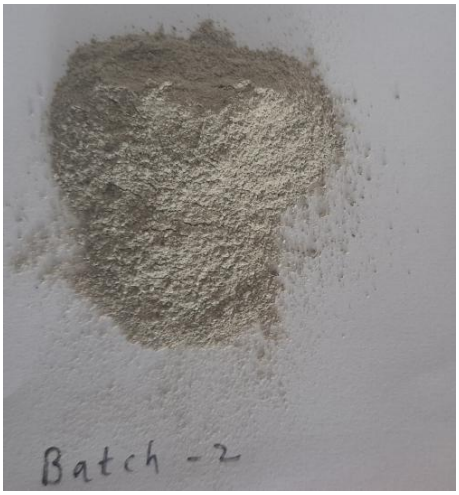

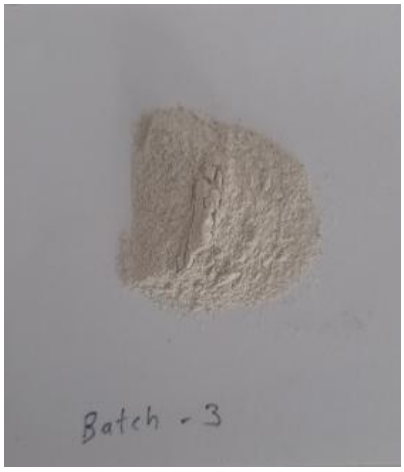

Fig. 6– Final Product of Batch-2 **Fig.7 – Final Product of Batch-3**

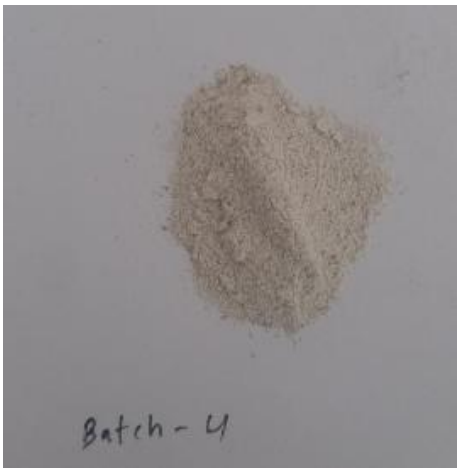

Fig. 8– Final Product of Batch-4

Declaration by Authors

Ethical Approval: Approved

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Conflict of Interest: The authors declare no conflict of interest.

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Refrences-

1. Nagarjuna . Rasendra Mangalam of Nagarjuna. 3\112. In: Sharma HS, editor. Varanasi: Choukhamba Orientalia; 2008. p. 84.

2. Shastri B, editor. 7th ed. Varanasi: Choukhamba Sanskrit Sansthan; 2002. Commentary Vidhyotani of Shastri L on Yogaratnakara of Anonymous; p. 118.
3. Acharya YT. 13th ed. Ch. 14. Nagpur: Shri Baidhnath Ayurved Bhavan Ltd; 2008. Siddha Yoga Sangraha. Rajyakshma Urahkshatadhikar; pp. 83–4.
4. Sharma H, Rasa Yoga Sagara. Reprint ed. Varanasi: Chaukhamba Krishnadas Academy; 2004. p. 378.
5. Acharya YT. 13th ed. Ch. 14. Nagpur: Shri Baidhnath Ayurved Bhavan Ltd; 2008. Siddha Yoga Sangraha. Rajyakshma Urahkshatadhikar; pp. 83–4.
6. Sharma H, Rasa Yoga Sagara. Reprint ed. Varanasi: Chaukhamba Krishnadas Academy; 2004. p. 378.