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***Dadru* and its Ayurvedic formulations w. s. r to Fungal Infections - A Review**

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ABSTRACT

Prevalence rate of fungal infection is found to be 20-25% worldwide according to WHO. Nowadays oral and topical antifungals are used to treat these fungal infections. But due to its increased use, people developed resistance against this drugs. This led to rise in identification of some safe herbal drug or formulations which can be used to treat these infections and they show good efficacy and safety.

Ayurveda has mentioned a skin disorder, *dadru* whose symptoms resemble with that of fungal infections. So treatment of *dadru* can be investigated in fungal infections. For that it's important to understand the meaning and symptoms of *dadru*, its correlations with fungal infection and its treatment mentioned in *ayurveda* and allopathic science. Also, in ayurvedic literature there are ample of pharmaceutical formulations mentioned for the treatment of *dadru*. In this study an attempt has been made to compile all the data about *dadru*, symptoms, treatment and formulations mentioned in *Charak samhita*, *Sushrut samhita*, *Asthang sangrah*, *Madhav nidhan*, *Bhavprakash*, *Yogratnakar*, *Sharangdhar*, *Rasa ratna samucchya* and *rasa tarangini* in one place so that researchers can use it and further evaluated them in preclinical and clinical studies for its efficacy and safety.

KEYWORDS

Fungal Infection, Dadru, Formulation, Charak Samhita, Sushrut Samhita, Bhavparkash, Yogratnakar, Sharangdhar, Rasa Ratna Samucchya, Rasa Tarangini



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INTRODUCTION

Dadru is one of most common *twak vikara* affecting all ages of the population, still stands as a challenge to different medical system. In recent years, it has been noticed that there is considerable increase in incidence of the skin problem in tropical and developing countries like India. Tinea, superficial fungal infections mostly caused by three species of fungi present the same symptoms as that of *dadru*. This infections are of different types and are named based on the involvement of body part - tinea corporis (general skin), tinea cruris/jock itch (groin), tinea capitis (scalp), tinea barbae/ tinea sycosis/ barber's itch (beard and moustache) tinea unguium (nail) and tinea pedis/athlete's foot (feet) collectively known as dermatophytes. Tinea infections are also called as ringworm because it has a clinical presentation like red patches in the shape of ring. According to Ayurveda fungal infection is diagnosed as "*dadru*" because of its similar symptoms. *Dadru* is caused due to involvement of *dosha* like- *kapha- pitta*. *Kapha* and *pitta dosha* gets vitiated and manifest in the skin and there cause the accumulation of toxins. These toxins further gets accumulated in deeper tissues of skin like *rasa* (nutrient plasma), *rakta*, (blood), *mamsa* (muscles) and *lasika* (lymphatic). These toxins cause

contamination of deeper tissues. Contamination of these deeper tissues and aggravation of *kapha/pitta dosha* leads to *dadru* i.e. ringworm. Also third *dosha vata* is considered to be involved. Thus it is *tridoshaj* disease, in which prime involved *doshas* are *kapha* and *pitta*.

REVIEW OF LITERATURE

Various references of *dadru* and fungal infections are reviewed and are stated below:

DADRU-

STHANA OF DADRU-

According to *Charak samhita*, *Dadru* is said to be located in the 4th layer of *twacha*.

HETU/NIDAN OF DADRU

According to different *acharya*, the nidan of *dadru* are shown in (Table 1).

LAKSHANA OF DADRU-

Symptoms of *dadru* by different *acharyas* are stated below:

- स्कण्डूरागपिडकं दद्रुमण्डलमुदगतमा (च. चि. 7/21)
- अतसीपुष्पवर्णानि ताम्राणि वा विसर्पीणि पिडकावन्ति च दद्रुकुष्ठानिः।
तयोर्द्वयोरप्युत्सन्नता परिमण्डलता कण्डुश्चिरोत्थनत्वं
-चेति सामान्यानि रूपाणि॥(सु. नि. 5/8)
- दीर्घप्रताना दूर्वावदतसीकुसुमच्छविः।
उत्सन्नमण्डला दद्रुः कण्डूमत्यनुषगिडिणि॥(अ. ह. नि 14/24)
- रोक्ष्यकण्डूदाहास्त्राववन्ति मंडलानि वृद्धिमन्ति दद्रुः।(का. सं. चि.)



- सकण्डूरागपिडकं दद्रुमण्डलमुदगतमा
- सकण्डूरागपिडकं दद्रुमण्डलमुदगतमा(यो. र. उ. कुष्ठ.22)

8/30-31)

Table 1 *Nidan* of dadru according to different author

	Ch.S	Su.S	B.S	H.S	M.N
<i>Mithya Ahara</i>					
<i>Adhyashana</i>	+	+	-	+	+
<i>Vishamashana</i>	+	+	-	-	-
<i>Atyashana</i>	+	+	-	-	-
Intake of food during indigestion	+	+	-	-	+
Continuous and excessive use of <i>Madhu, Fanita, Matsya, Lakucha, Mulaka, Kakamachi</i> , and intake of above substances while having <i>Ajirna</i>	+	-	-	-	-
Excessive <i>Snehana</i>	-	-	-	-	-
<i>Vidahi Ahara</i> without emesis of undigested food	+	-	+	+	-
<i>Rasatah</i>					
Excessive intake of <i>Amla</i> and <i>Lavana Rasa</i>	+	-	-	-	+
<i>Dravyataha</i>					
Excessive intake of <i>gramya, anupa, audaka, mamsa</i>	-	-	+	-	-
<i>Navanna, dadhi, masa, matsya, mulaka, tila, pishtanna, kshira, guda</i>	+	-	-	-	+
<i>Dushivisha</i>	-	+	-	-	-
<i>Dushita Jala</i>	-	-	-	+	-
<i>Gunataha</i>					
Excessive <i>Dravya, Snigdha Ahara</i>	+	-	-	+	+

Table 2 *Lakshana* of dadru according to different author

S.no	Lakshanas	C.S.	S.S.	AH	AS	MN	KS	BP	YR	Fungal
1	<i>Rookshata</i>						+			+
2	<i>Kandu</i>	+	+	+	+	+	+	+	+	+
3	<i>Daha</i>						+			
4	<i>Strava</i>						+			+
5	<i>Mandala</i>	+	+	+	+	+	+	+	+	
6	<i>Raga</i>	+				+		+	+	+
7	<i>Pidaka</i>	+	+		+			+	+	+
8	<i>Visarpini</i>		+							
9	<i>Chirothana</i>		+							
10	<i>Unnata</i>		+	+						
11	<i>Parishushka</i>									
12	<i>Anushangini</i>			+						
13	<i>Vedana</i>									+

Table 3 *Dadru* included in which type according to different *acharya*

S.no	Name of the granth	Maha kustha	Kshudrakustha	Dosha
1	<i>Charak Samhita</i>		+	PK
2	<i>Shusrut Samhita</i>	+		K
3	<i>Asthang Hridaya</i>	+		KP
4	<i>Madhav Nidana</i>		+	KP
5	<i>Kashyap Samhita</i>	+		
6	<i>Bhav Prakash</i>		+	
7	<i>Yog Ratnakar</i>		+	
8	<i>Sharangdhar Samhita</i>	18 types of <i>kustha</i>		
9	<i>Rasa Ratna Samucchya</i>	Doesn't mentioned the types		



The *roopas/lakshana/symptoms* of *Dadru* according to various authors are shown in the (Table 2).

CLASSIFICATION OF DADRU

Mainly all skin disorders in *ayurveda* are classified into *maha and kshudra kustha*. *Dadru* classification according to different *acharya* are shown in (Table 3).

TYPES OF DADRU

Acharya Dalahan has mentioned two types of *dadru- sita dadru* and *asita dadru*. On expanding this types he has told that *sita dadru* is one which is explained by *acharya charaka* under *kshudra kushta* which can be easily cured and *asita dadru* is one which is explained by *acharya sushruta* under

mahakustha that can't be cured with any treatment.

दद्रुकुष्ठं द्विविधं सितमसितं चा(dalahan)

✓ असितस्य महोपक्रमसाध्यत्वादानुबन्धित्वप्रकर्षाच्च महाकुष्ठेषु मध्ये सुश्रुते पाठः।

✓ सितदद्रुकुष्ठस्य सुखसाध्यत्वादुत्तरोत्तरधात्वनुप्रवेशाभावात्तथाऽत्यर्थपीडाहितत्वाच्च चरके क्षुद्रकुष्ठेषु मध्ये पाठ इत्यदोषः ॥

DOSHA DUSHYA SANKALPNA –

Dosha, dushya and *strotas* involved in the manifestation of *dadru* according to different authors are classified in Table 4.

TREATMENT OF DADRU

There is no specific treatment plan told in *samhitas* to cure *dadru*. But a general treatment for *kustha* is told that can be

Table 4 *Doshas, dushya, strotas, adhistan* involved according to various *Acharya's*

	C.S.	S.S	A.H	A.S	M.N
<i>Dosha</i>	<i>Pitta-kapha</i>	<i>Kapha</i>	<i>Kapha-pitta</i>	<i>Kaphapitta</i>	<i>Kapha-pitta</i>
<i>Dushya</i>	<i>Twak, Rakta, Mansa, Ambu</i>	<i>Twak, Rakta, Mansa, Ambu</i>	<i>Twak, Rakta, Mansa, Ambu</i>	<i>Twak, Rakta, Mansa, Ambu</i>	<i>Twak, Rakta, Lasika, Ambu</i>
<i>Strotas</i>	<i>Rasa, Rakta</i>	<i>Rasa, Rakta</i>	<i>Rasa, Rakta</i>	<i>Rasa, Rakta</i>	<i>Rasa, Rakta</i>

applied in all types of *kustha*. *Acharya charaka* has said that “All types of *kustha* are caused due to tri *dosha* but there may be predominance of some *dosha*, the treatment is to be planned in the manner of curing predominant *dosha* first and then lesser one”. (C. Ci. 7/31-32)

According to the *dosha* predominance *charak* has mentioned the treatment-

- ✓ For *vata dosha ghrta pana*,
- ✓ For *pitta dosha Rakta mokshan* and *virechan*

- ✓ for *kapha dosha Vaman* and;
- ✓ After the proper *shodhan* of the body, the *lepa* applied on the *kustha roga* tends to be effective.(C. CI. 7/53)

For *shodhan karma*, following *yoga* are mentioned in *charak chikitsa sthan*:-

- *Vaman* by *indrajav, madanphala, mulethi, patol patra- swarasa/ kwatha + nimbpatra swarasa*
- *Virechan* by using *shweta nishoth, danti mula, triphala*



Acharya *Sushrut* has also mentioned that first *sanshodan karma* is to be done then in *twachagat* or *rasagat kustha lepa* of *shodhan dravya* is to be applied.

There are many reference of formulations found in *samhitas* for the treatment of *kustha* and *dadru*. As general plan of *kustha* treatment is followed so the formulations mentioned under *kustha* can also be used in *dadru*. Formulations mentioned in some of these *samhitas* for *Dadru* are stated as follows:

FORMULATIONS MENTIONED IN-

Table 5 Formulation in *charak samhita* for internal use-

S.no	Name of the formulation	Ingredients	Roga-adhikar
1	<i>Tri Yog</i>	<ul style="list-style-type: none"> <i>Daruharidra</i>, Cow Urine <i>Rasanjana</i>, Cow Urine <i>Sunthi</i>, <i>Pippali</i>, <i>Maricha</i>, <i>Guda</i>, <i>Tila Taila</i>, <i>Haritaki</i>- For 1 Month 	<i>Kustha</i>
2	<i>Gandhak Use</i>	<i>Gandhak</i> , <i>Amala Swarasa</i> , <i>Honey</i>	Cure 17 type of <i>Kustha</i>
3	<i>Swarna Makshika Use</i>	<i>Swarna Makshika Bhasma</i> , <i>Cowurine</i>	Cure 17 type of <i>Kustha</i>
4	<i>Sheelajet Use</i>	<i>Parad Bhasma</i> (Processed By <i>Gandhak</i> And <i>Swarna Makshik</i>) with <i>Vajra Sheelajet</i> Or <i>Yograj Yog</i>	<i>Kustha</i>
5	<i>Kanakbindu Aristha</i>	<i>Khadira Kwatha</i> , <i>Triphala</i> , <i>Trikatu</i> , <i>Vayavidanga</i> , <i>Haridra</i> , <i>Nagarmotha</i> , <i>Vasa</i> , <i>Indrayav</i> , <i>Daruharidra</i> , <i>Guduchi</i>	In 1 month cure <i>Maha Kustha</i> In 15 days cure <i>kshudra Kustha</i>
6	<i>Bhalatak Ghrita</i>	<i>Bhalatak</i> , <i>Triphala</i> , <i>Nimb</i> along with the food and ghee. So it can be interpreted that ghee processed by this ingredients are to be consumed along with the food	<i>Kustha</i>
7	<i>Triphal Ghrita</i>		
8	<i>Nimbadhi Ghrita</i>		

Table 6 Formulations in *charak samhita* for external use-

S.no	Name of the formulation	Ingredients	Roga adhikar
1	<i>Kustha-Nashak Lepa</i>	<i>Ela</i> , <i>Kuth</i> , <i>Daruharidra</i> , <i>Sathpushpa</i> , <i>Chitrak</i> , <i>Vayavidang</i> , <i>Rasvath</i> , <i>Haritaki</i>	<i>Kustha</i>
2	<i>Masyadhi Lepa</i>	<i>Jatamansi</i> , <i>Maricha</i> , <i>Sendhav Lavan</i> , <i>Haridra</i> , <i>Tagar</i> , <i>Snuhi</i> , <i>Grhyadhun</i> , <i>Gorochan</i> , <i>Palash Kshar</i> , <i>Cowurine</i>	<i>Kustha</i>
3	<i>Sidharthak Snaan, Kwatha, Lepa</i>	<i>Nagarmotha</i> , <i>Madan Phala</i> , <i>Triphala</i> , <i>Karanj Patra</i> , <i>Aamaltas Patra</i> , <i>Indrajoo</i> , <i>Daruharidra</i> , <i>Saptaparni</i>	<i>Kustha</i>

THE CHARAKA SAMHITA FOR THE MANAGEMENT OF DADRU

Formulation mentioned in *charak samhita* for internal and external use are given in the (Table no 5 and 6) respectively.

**Yoga Ratnakar* has mentioned this formulation by name of *vidangadhi lepa*.

FORMULATIONS MENTIONED IN THE SHUSRUT SAMHITA MANAGEMENT OF DADRU.

Formulation mentioned in *shusrut samhita* for the treatment of *kustha* and *dadru* are shown in (Table 7 and 8) respectively.



4	<i>Edgajaadi Lepa*</i>	<i>Chakramadh, Kuth, Saindhav Lavan, Sarsoon, Vayavidanga, Kanji</i>	<i>Dadru, Kustha</i>
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Table 7 Formulation in *shusrut samhita* internal use.

S.no	Name of the formulation	Ingredients	Roga adhikar
1	<i>Mahatiktak ghrita</i>	<i>Saptarni, amaltas, atis, patha, kutaki, guduchi, triphala, patol, nimb, pittpapda, duralbha, tryaman, nagarmotha, chandan, panchakh, haldi, pippali, indryan, murva, stavar, anantamul, indrayav, vasa, vacha, madhuk, chiryata, vidarikanda, ghrita, amala swaras</i>	<i>Kustha, kandu</i>
2	<i>Tiktak ghrita</i>	<i>Triphala, patol, nimb, vasa, kutaki, duralbha, tryaman, pittpapda, tryaman, nagarmotha, indrayav, chandan, chiryata, pippali, ghrita,</i>	<i>Kustha</i>
3	<i>Neel ghrita</i>	<i>Vayasi, kathgular, kutaki, loha churna, triphala, vijayasar, , indrajoo, trikatu, dalchini, devdaru, amaltas, kakjangha, danti, bakuchi, nagkesar, badi kateri, ghrita</i>	<i>Kustha (external and internal)</i>
4	<i>Katipya yog</i>	<ul style="list-style-type: none"> • <i>Haritaki, trikatu, gud, taila</i> • <i>Triphala, pippali, vidang, honey, ghrita</i> • <i>Haldi, gomutra</i> • <i>Chitrak/pippali, gomutra</i> • <i>Rasot, gomutra</i> • <i>Nimb, saptarni, laksha, nagarmotha, dashmula, haldi daruharidra, manjistha, triphala, trikatu, vasa, devdaru, chitrak, vidang, gomutra</i> 	<i>Kustha(lehan)</i>
5	<i>Siddh purana Ghrita</i>	<i>Amaltas, saptaparni, patol, kutaj, karanj, nimb, haldi, daruhaldi, mushak</i>	<i>Kustha</i>
6	<i>Triphala ghrita</i>	<i>With trikatu</i>	<i>Kustha</i>
7	<i>Guduchi yoga</i>	<i>Guduchi swarasa, kwath, ghrita</i>	<i>All types of kustha</i>

Table 8 Formulations in *sushrut samhita* for External Use

S.no	Name of the formulation	Ingredients	Roga adhikar
1	<i>Saptasiddh lepa</i>	<ul style="list-style-type: none"> • <i>Samudraphena, shak, gojihva, kodumbra, laksha, rala, rason, chakramadh, bakuchi, tejbala, kaner, madar, kutaj, amaltas, gomutra</i> • <i>Sajji kshar, tutha, nkasis, vidang ghryaduma, chitrak, kutaki, snuhi, haldi, saindhav lavan</i> • <i>Kshara of this ingredient stated in the above sentence+ palash kshar</i> • <i>Jyotishkphala, laksha, maricha, pippali, chameli patra</i> • <i>hartal, manasheela, madar ksheer, til sahijan bheej, maricha</i> • <i>sji kshara, kuth, tutha, kutaj, chitrak, vidang, maricha, manasheela</i> • <i>haritaki, karanj, vidang, pili sarson, saindhav lavan, gorochan, bakuchi, haldi, gomutra</i> 	<i>All types of kustha</i>
2	<i>Dadru lepa</i>	<ul style="list-style-type: none"> • <i>laksha, kuth, sarson, shriniket, haldi, trikatu, chakramardh, muli bheej(lepa)</i> • <i>saindhav lavan, chakramardh bhej, gud, nagkeshar, rasot, kapitth rasa(lepa)</i> • <i>swanakshiri, amaltas, shirish, nimb, ral, indryajav, ajakarn(lepa, snaan, ubatan)</i> 	<i>Dadru</i>
3	<i>Neel ghrita</i>	<i>Vayasi, kathgular, kutaki, loha churna, triphala, vijayasar, , indrajoo, trikatu, dalchini, devdaru, amaltas, kakjangha, danti, bakuchi, nagkesar, badi kateri, ghrita</i>	<i>Kustha (external and internal)</i>



4	<i>Mahaneel ghrita</i>	<i>Triphala, trikatu, tulsi, mahendi, makoy, amaltas, madar, varun, danti, kutaj, chitrak, daruhaldi, badi kateri, gobhar-rasa, dahi, dugda, mutra, ghrita, chiryata, karan bhej, nilika, kala nishoth, bakuchi, pilu, nimb phul</i>	<i>Kustha</i>
5	<i>Vajrak taila</i>	<i>Saptparni, karanj, madar, chameli, kaner, snuhi, shirish, chitrak aprajita, vatsnabh, kalihari, vajra, kasis, manasheela, trikatu, triphala, haldi, daruharidra, pili sarsoon, vidang, chakramardh, gomutra, taila</i>	<i>Kustha</i>
6	<i>Mahavajrak taila</i>	<i>Pili sarson, karanj, putikaranj, haldi, daruhaldi, rasot, kutaj chakramardh, saptparni, indrayan, laksha, ral, arka ksheer, aprajita, amaltas, snuhi, shirish, sorashtramrtika, kutaj, bhilawa, vacha, kuth, vidang, manjistha, kalihari, chitrak, chameli, katutumbi, kaporkachri, muli, saindhav lavan, kaner, ghruhdhoom, vatsanabh, kuchala, sindur, tejabala, tutha, gomutra, tila taila</i>	All types of <i>kustha</i>

FORMULATION MENTIONED IN THE *BHAVPRAKASH* FOR THE MANAGEMENT OF *DADRU*

Bhavprakash has mentioned various formulation for internal and external use in *dadru* that are stated in (Table 9 and 10) respectively.

FORMULATION MENTIONED IN *SHARANGDHAR SAMHITA* FOR THE MANAGEMENT OF *DADRU*

Formulations mentioned in *Sharangdhar samhita* for the management of *dadru* for internal and external use are shown in (Table 11 and 12) respectively.

FORMULATIONS MENTIONED IN *YOG RATNAKAR FOR THE* MANAGEMENT OF *DADRU*

For the management of *dadru* various *kalpas* for internal and external use mentioned in *yog ratnakar* are stated in (Table 13 and 14) respectively.

FORMULATIONS MENTIONED IN *RASA RATNA SAMUCHYA* FOR THE MANAGEMENT OF *DADRU*

In *rasa ratna samuchya*, for the treatment of *dadru* various internal and external formulations are mentioned which are shown in (Table 15 and 16) respectively.

MALAHAR MENTIONED IN *RASA TARANGINI FOR THE* MANAGEMENT OF *DADRU*

Malahar/ointment mentioned by *rasa trangini* are stated below in the (Table 17).

RINGWORM

Ringworm infection or *Tinea* is the name of a group of skin diseases which is caused by a fungus. Ringworm is a red skin rash that usually forms a ring in normal- looking skin. A worm doesn't cause it. According to the site involved in the infection they are classified as:

1. TINEA CAPITIS

It includes infections of areas of both -scalp and hair.

Clinical Diagnosis



- It is predominantly seen in the children(3-14 years), but is uncommon in adults.
- Usual cause for transmission of this infection is by using the infected combs or hair brushes.
- Clinical diagnosis of it is confirmed by the microscopic examination of KOH preparation that is made from scales and plucked out hair.
- Wood's lamp examination may demonstrate the fluorescence because of pteridine which is derived from certain dermatophytes.

Treatment

Topical Therapy

- ✓ It has a little role in treatment.
- ✓ Use of antifungal shampoos will help in decreasing the viability of fungal spores that are present on the hair.

Systemic Antifungal Therapy

- ✓ It is the main stay of treatment
- ✓ Griseofulvin: is still the drug of choice for it and it is the only FDA approved oral gold standard treatment for tinea capitis. It is to be given after fatty meals for 6-8 weeks.
- ✓ It is known to have highly efficacy and has an excellent long-term safety record.

2. TINEA BARBAE

Clinical Diagnosis

- Tinea barbae is also known as Tinea sycosis or barber's itch.
- It is the ringworm of area of beard and moustache in adult males with the invasion of coarse hairs.
- Ringworm of these regions in females and children are called as tinea faciei.
- Pathogenesis, infecting dermatophytes and treatment are same as that of tinea capitis.
- It is presented as highly inflammatory folliculitis with the features of kerion.
- The pain present is not in a proportion to that of inflammation.

Treatment

Oral and topical antifungals.

3. TINEA UNGUIUM

Tinea unguium means infection of the area of nail plate by dermatophytes only.

Clinical Diagnosis

- In distal and lateral subungual onychomycosis (DLSO) the most common type are: The nail plate gets rough, thickened, cracked and may get lifted up by subungual hyperkeratosis. It is presented as yellow or white patch of discoloration at the free edge of nail plate near lateral nail fold.
- Superficial white onychomycosis (SWO) presents as powdery white



superficial erosions on dorsal surface of the nail and;

- Proximal subungual onychomycosis (PSO) which involves the part of nail plate adjoining to posterior nail fold and it is particularly associated with AIDS patients.

Treatment

Systemic Therapy

- Oral antifungals are mainstay of treatment for the Tinea unguium.(Tinea unguium is most difficult to eradicate).
- Triazoles and allylamines have become first-line of choice of drugs and they provide the higher cure rates with fewer relapses

Topical Therapy

- Ciclopirox olamine (8% lacquer) is to be applied daily for the 48 weeks.
- Topical therapy is considered to be more cost-effective than that of systemic therapy.

4. TINEA PEDIS

This common type of tinea occurs on the feet and between the toes.

Clinical diagnosis

- It can be caused due to sweating, not drying the feet after swimming or bathing, wearing tight socks and shoes, and warm weather.
- Clinical symptoms of tinea pedis include- itchy, burning rash on the feet,

whitening and breakdown of the skin between the toes, scaling of the feet, blisters on the feet.

Treatment

Oral and topical antifungals.

5. TINEA CORPORIS

These are the fungal infection which occurs in the area of genital.

Clinical Diagnosis

- Jock itch or tinea corporis may be hard to cure.
- This condition is found more commonly in men and rarely in women. It happens more often in the warm weather.
- Symptoms include- red, ring-like patches in the area of groin and inner thighs, but not the scrotum, itching and pain in the groin area.

Treatment

Oral and topical antifungals.

6. TINEA CRURIS

This infection occurs anywhere on the body or the face but is more common in skin folds. Also is more commonly found in warmer climates.

Clinical Diagnosis

- Symptoms include- red, ring-shaped patches with raised, scaly edges and itching.

Treatment

Oral and topical antifungal.



7. TINEA INCOGNITO (STEROID MODIFIED TINEA)

These are ringworm infections which become unrecognizable due to its modification by over usage of the topical or systemic corticosteroids.

Clinical Diagnosis

- High index of suspicion for the lesions appears especially on the face, groins and hands.
- Stopping of steroids will make the scaling more evident and then scrapping will become easier.
- KOH smear examination will show abundant fungal hyphae which is considered to be beneficial for the diagnosis.

Treatment

Topical and Systemic Antifungal

- ✓ Topical therapy should be given to all patients of tinea infections.
- ✓ Supplement it with systemic antifungal drugs when there is involvement of scalp, hair or widespread skin.

SYSTEMIC TREATMENT OF DERMATOPHYTOSIS

Oral antifungal used in fungal infection are presented in (Table 18)

VARIOUS TOPICAL ANTIFUNGAL AGENTS

Topical agents used in fungal infection are shown in (Table 19)

Table 9 Formulation in *Bhavprakash samhita* for the internal use-

S.no	Name of the formulation	Ingredients	Roga adhikar
1	<i>Panchnimbka Avaleha</i>	<i>Nimnb Panchang, Bhringraj Swaras, Triphala, Trikatu, Bhrami, Gukshur, Bhilawa, Chitrak, Vayavidanga, Barahikand, Loha Bhasma, Haldi, Dadruharidra, Bakuchi, Amaltas, Shaker, Kuth, Indra, Patha, Kher, Vijyasara, Nimb Kwatha</i>	<i>Dadru</i>
2	<i>Svayambhuv Guggulu</i>	<i>Bakuchi, Shilajet, Guggul, Swarnamakshik, Loha Bhasma, Mundi, Amalaki, Haritaki, Karanj, Kher, Guduchi, Nishoth, Jamalghota, Nagarmotha, Vayavidang, Haldi, Kudha, Honey</i>	<i>Kustha</i>
3	<i>Ekvishantik Guggul</i>	<i>Chitrak, Triphala, Trikatu, Jeera, Kamooja, Vacha, Saindhav Lavan, Atiit, Kuth, Chavya, Yavasa, Vayavidanga, Ajmoda, Nagarmotha, Devdaru</i>	18 types of <i>Kustha</i>
4	<i>Kaishor Guggul</i>		<i>Kustha</i>
5	<i>Amritbhallatak Avaleha</i>	<i>Bhilawa, Guduchi, Bhel, Guduchi, Bakuchi, Chakramadh, Triphala, Trikatu, Manjitha, Ajwyain, Saindhav Lavan, Nagarmotha, Dalchini, Ela, Nagkesar, Pittpapda, Tejpatra, Sughandwala, Khas, Chandan, Gukshur, Kachur, Rakt Chandan, Ghee, Dugda</i>	<i>Kustha</i>
6	<i>Mahabhallatak Avaleha</i>	<i>Nimb, Shweta Sariva, Atis, Kutaki, Tryaman, Triphala, Nagarmotha, Pittpapda, Bakuchi, Yavasa, Vacha, Kher, Shweta Chandan, Patha, Sunthi, Kachur, Bharangi, Vasa, Chiryata, Indrajoo, Kali Sariva, Indryan, Murva, Vayavidanga, Kutaj, Chitrak, Hastikand, Guduchi, Vakayan, Patol, Haldi, Daruhaldi, Pippali, Amaltas,</i>	<i>Dadru</i>



		<i>Satona, Nishoth, Bet, Shweta Gunjja, Majith, Kalihari, Rasna, Karanj, Punarnava, Danti, Vijyasar, Bhringraj, Miyavansa, Ankol, Shakhont, Triphala, Trikatu, Nagarmotha, Vayavidanga, Chitrak, Saindhav Lavan, Chandan, Kuth, Ajwaiyn</i>	
7	<i>Laghumanjisthaadi Kwath</i>	<i>Manjistha, Triphala, Kutaki, Vacha, Daruharidra, Kuth, Nimb</i>	<i>Dadru</i>
8	<i>Madhyamanjisthaadi Kwatha</i>	<i>Manjistha, Bakuchi, Chakramadh, Nimb, Haritaki, Haldi, Amalaki, Vasa, Satavari, Bala, Nagbala, Yasthimadhu, Gukshur, Patol, Khas, Guduchi, Rakt Chandan</i>	<i>Kustha</i>
9	<i>Bhrinmanjisthaadi Kwath</i>	<i>Manjistha, Kutaj, Guduchi, Nagarmotha, Vacha, Sunthi, Haldi, Daruharidra, Kantkari, Nimb, Patol Kutaki, Bharangi, Vayavidyang, Chitrak, Murva, Devdaru, Indrayav, Bhringraj, Pippali, Tryaman, Patha, Satavari, Kher, Triphala, Chiryata, Bakayan, Vijyasar, Amaltas, Phulpriyangu, Bakuchi, Raktchandan, Varuna, Danti, Shakhotak, Vasa, Pitppapda, Sariva, Atis, Yavasa, Indrayan, Sugandhvala</i>	<i>18 types of Kustha</i>
10	<i>Laghumarichadi Taila</i>	<i>Kalimirch, Nishoth, Nagarmotha, Hartal, Manashela, Devdaru, Haldi, Daruharidra, Jatamansi, Kutchandan, Indrayan, Kaner, Madar, Gobar Ras, Vatsnabh, Katu Taila, Cow Urine</i>	<i>Dadru(internal)</i>
11	<i>Mahamarichadi Taila</i>	<i>Kalimaricha, Nishoth, Danti, Madar Ksheer, Gobar Ras, Devdaru, Haldi, Daruhaldi, Jatamansi, Kuth, Chandan, Indryan, Kaner, Hartal, Manasheela, Chitrak, Kalihari, Nagarmotha, Vayavidang, Chakramadh, Sirish, Kutaj, Nimb, Saptaparni, Snuhi, Syamak, Karanj, Kher, Bakuchi, Vacha, Jyotishmati, Vatsnabh, Katu Taila, Cow Urine</i>	<i>Dadru</i>
12	<i>Somraji Ghrita</i>	<i>Bakuchi, Khersara, Patol, Triphala, Trayaman, Duralbha, Kutaki, Guggul, Ghrita</i>	<i>18 Types of Kustha</i>

Table 10 Formulation in *bhavprakash samhita* for the external use-

S.no	Name of the formulation	Ingredients	Roga adhikar
1	<i>Pathyaadhi Lepa</i>	<i>Haritaki, Karanj, Sarson, Haldi, Bakuchi, Saindhav Lavan, Vayavidang, Cow Urine</i>	<i>Kustha</i>
2	<i>Somrajyaudivartan</i>	<i>Bakuchi, Adhrak Swaras</i>	<i>Kustha</i>
3	<i>Laghumarichadi Taila</i>	<i>Kalimirch, Nishoth, Nagarmotha, Hartal, Manashela, Devdaru, Haldi, Daruharidra, Jatamansi, Kutchandan, Indrayan, Kaner, Madar, Gobar Ras, Vatsnabh, Katu Taila, Cow Urine</i>	<i>Kustha(external)</i>
4	<i>Dadru Lepa</i>	<ul style="list-style-type: none"> • <i>Kuth, Vayavidanga, Chakramadh, Haldi, Saindhav Lavan, Sarson, Nimbu Swaras</i> • <i>Gandlik, Sarson, Snuhi, Chakramadh, Takra</i> 	<i>Kustha, Dadru</i> <i>Dadru</i>

Table 11 Formulations in *sharandhar samhita* for internal use

S.No	Name Of The Formulation	Reference	Roga Adhikar
1	<i>Vhrinmanjisthaadi Kwatha</i>	<i>S. M. 2/137-142</i>	<i>18 types of Kustha</i>
2	<i>Nimbptra Kalka</i>	<i>S.M. 5/5</i>	<i>Kustha</i>
3	<i>Triphal Churna</i>	<i>S.M. 6/9-11</i>	<i>Kustha</i>
4	<i>Tryushna Churna</i>	<i>S.M. 6/12</i>	<i>Kustha</i>
5	<i>Narayan Churna</i>	<i>S. M. 6/83-91</i>	<i>Kustha</i>
6	<i>Hapushadadi Churna</i>	<i>S. M. 6/92-94</i>	<i>Kustha</i>
7	<i>Lavanbhaskar Churna</i>	<i>S. M. 6/140-146</i>	<i>Kustha</i>
8	<i>Panchnimba Churna</i>	<i>S. M. 6/150-155</i>	<i>All types of Kustha</i>



9	<i>Navayas Churna</i>	S. M. 6/161-163	<i>Kustha</i>
10	<i>Mandur Vatak</i>	S. M. 7/34-36	<i>Kustha</i>
11	<i>Chandraprabha Vati</i>	S. M. 7/ 40-49	<i>Kustha</i>
12	<i>Yograj Guggul</i>	S. M. 7/56-69	18 types of <i>Kustha</i>
13	<i>Kaishor Guggul</i>	S. M. 7/70-81	All types of <i>Kustha</i>
14	<i>Triphala Modhak</i>	S. M. 7/88-94	All types of <i>Kustha</i>
15	<i>Kanchnar Guggul</i>	S. M. 7/95-100	<i>Kustha</i>
16	<i>Amrita Ghrita</i>	S. M. 9/44	<i>Dukhsadhya Kustha</i>
17	<i>Mahapanchtikta Ghrita</i>	S. M. 9/45-50	<i>Kustha</i>
18	<i>Shadbindu Ghrita</i>	S. M. 9/60-65	<i>Kustha</i>
19	<i>Panchtikta Ghrita</i>	S. M. 9/91-92	<i>Kustha</i>
20	<i>Usheer Aasav</i>	S. M. 10/15-19	<i>Kustha</i>
21	<i>Loha Aasav</i>	S. M.10/36-40	<i>Kustha</i>
22	<i>Mridvika Arishta</i>	S. M. 10/41-45	<i>Kustha</i>
23	<i>Devdarvaadhi Arishta</i>	S. M. 10/55-61	<i>Kustha</i>
24	<i>Khadir Arishta</i>	S. M. 10/ 62-67	All types of <i>Kustha</i>
25	<i>Babbul Arishta</i>	S. M. 10/68-70	<i>Kustha</i>
26	<i>Rohitak Arishta</i>	S. M. 10/75-78	<i>Kustha</i>
27	<i>Dashmula Arishta</i>	S. M. 10/79-94	<i>Kustha</i>
28	<i>Mahataleshwar Rasa</i>	S.M.11/175-179	All types of <i>Kustha</i>
29	<i>Kusthakuthar Rasa</i>	S. M. 11/180-183	All types of <i>Kustha</i>
30	<i>Kanaksundra Rasa</i>	S. M. 11/234-239	18 types of <i>Kustha</i>

Table 12 Formulation in *sharangdhar samhita* for external use

S.No	Name Of The Formulation	Reference	Roga Adhikar
1	<i>Kasisadi Ghrita</i>	S. M. 9/51-57	<i>Kustha, Dadru</i>
2	<i>Marichadi Taila</i>	S. M. 9/148-152	<i>Kusthahar</i>
3	<i>Vajri Taila</i>	S. M. 9/182-186	All types of <i>Kustha</i>

Table 13 Formulation in *yog ratnakar* for internal use

S.No	Name of the Formulation	Ingredients	Roga adhikar
1	<i>Khadirashtak Kwatha</i>	<i>Khadir, Triphala, Nimb, Patol Patra, Guduchi, Vasa</i>	<i>Kustha</i>
2	<i>Mahakashya</i>	<i>Sunthi, Nimb, Kiratikta, Pippali, Patha, Haldi, Daruharidra, Traymaan, Triphala, Guduchi, Kamal, Kutaki, Vasa, Vacha, Bakuchi, Manjistha, Ativisha, Duralbha, Mahanimb, Chitrak, Amaltas, Mahri, Kutaj, Bharangi, Nagarmotha, Yav, Murva, Patol, Rakt Chandan, Krushan Sariva, Pittpapda, Shweta Sariva, Vayavidanga, Khadir, Gomutra</i>	18 types of <i>Kustha</i>
3	<i>Khadiras Rasa</i>	<i>Khadir Panchang, Goghrita, Amalaki Swarasa, Madhu</i>	<i>Kustha</i>
4	<i>Nimbadi Kalka</i>	<i>Nimb Patra, , Amala, Vyavidang, Bakuchi</i>	<i>Kustha</i>
5	<i>Panchnimb Churna</i>	<i>Nimb Panchang, Vijya Sara, Khadir, Chitrak Mula, Vayavidang, Amaltas, Sharkar, Bhilawa, Triphala, Gokshur, Chakramardh, Bakuchi, Trikatu, Halfi, Loha Bhasma, Bhringraj Swarasa, Godugda, Goghrita</i>	<i>Kustha</i>
8	<i>Vidangadi Churna</i>	<i>Vayavidanga, Triphala, Pippali, Madhu</i>	<i>Kustha</i>
9	<i>Ekvishtyanti Guggul</i>	<i>Triphala, Trikatu, Jeera, Vacha, Saindhav Lavan, Ativisha, Kuth, Chavya, Ela, Yvakkshara, Vayavidang, Ajmoda, Nagarmotha, Devdaru, Guggul, Goghrita</i>	18 types of <i>kustha</i>
10	<i>Triphala Modhak</i>	<i>Triphala, Vidang, Loha Bhasma, Bhilawa, Bakuchi, Shilajeet, Guggul, Pushkarmula, Nishoth, Chitrakmula, Trikatu, Dalchini, Tejpatra, Kesar, Nagarmotha</i>	18 types of <i>kustha</i>
11	<i>Bhalatak Avaleha</i>	<i>Nimb, Shyاملata, Atees, Kutaki, Tryaman, Triphala, Nagarmotha, Pittpapda, Bakuchi, Anantmula, Vacha, Khadir, Chandan, Patha, Trikatu, Kachoor, Bharngi, Vasa, Bhoonimb, Kutaj, Kali Nishoth,</i>	<i>Dadru, Kustha</i>



		<i>Mahri, Murva, Vayavidang, Ativisha, Chitrakmula, Hasti Karna, Palasmula, Nagarmotha, Patol, Haldi, Daruhaldi, Etc</i>	
12	<i>Dhatryavaleha</i>	<i>Triphala, Vayavidang, Chitrak, Bhilawa, Bakuchi, Loha Bhasma, Bharangi</i>	All types of <i>Kustha</i>
13	<i>Shshankalekhadi Leha</i>	<i>Bakuchi, Vayavidanga, Pippali, Chitrak, Mandur Bhasma, Amalaki, Til Taila</i>	All types of <i>Kustha</i>
14	<i>Tiktashatpal Ghrita</i>	<i>Nimb, Patol, Daruhaldi, Duralbha, Katuki, Triphala, Pittpapda, Tryaman, Raktchandan, Kiratikta, Pippali, Nagarmotha, Indrayav</i>	<i>Kustha</i>
15	<i>Panchtikta Ghrita</i>	<i>Nimb, Patol, Kantakari, Guduchi, Vasa, Goghrita Triphala Kalka</i>	<i>Kustha roga</i>
16	<i>Mahapanchtikta Ghrita</i>	<i>Saptaparni, Ativisha, Amaltas, Kutaki, Patha, Nagarmotha, Usher, Triphala, Patol, Nimb, Pittpapda, Jvasa, Raktachandan, Pippali, Padumkath, Haldi, Daruhaldi, Vacha, Mahri, Satavrimula, Sariva, Krushansariva, Indrayav, Vasa, Murvamul, Guduchi, Kiratikta, Yasthimadhu, Tryamaan, Goghrita, Amala Swaras</i>	<i>Kustha</i>
17	<i>Mahakhadir Ghrita</i>	<i>Khadir, Kranj, Vijyasar, Nimb, Vetas, Pittpapda, Kutaj, Vasa, Vayavidang, Haldi, Daruhaldi, Amaltas, Guduchi, Triphala, Nisoth, Saptaparni</i>	All types of <i>Kustha</i>
18	<i>Khadir Asava</i>	<i>Khadir, Triphala, Devdaru, Daruhaldi Bakuchi, Madhu, Dhatki Pushpa, Sharkar, Kankol, Maricha, Lavang, Ela, Jatiphala, Dalchini, Nagkesar, Maricha, Tejpatra, Pippali</i>	All types of <i>Kustha</i>
19	<i>Kanak Aristha</i>	<i>Khadir, Triphala, Trikatu, Haldi, Dhatur, Bakuchi, Guduchi, Vayavidang, Madhu, Dhatki Pushpa</i>	<i>Kustha</i>
20	<i>Triphala Gutika</i>	<i>Triphala, Bhilava, Loha Bhasma, Krishna Jeerak, Bharangi, Langali, Trikatu, Guda, Varahikandh</i>	<i>Kustha, Dadru</i>
21	<i>Navak Kashaya (Kwatha)</i>	<i>Triphala, Neem, Patol, Manjistha, Kutaki, Vacha, Haridra</i>	<i>Kapha-Pitta Kustha</i>

Table 14 Formulation in *yog ratnakar* for external use

S.No	Name of the Formulation	Ingredients	Roga adhikar
1	<i>Pathyadi Lepa</i>	<i>Haritaki, Krnja, Shweta Sarson, Haldi, Krushan Jirak, Saindhav Lavan, Vayavidanga</i>	<i>Kustha</i>
2	<i>Elaadi Lepa</i>	<i>Ela, Kuth, Vayavidanga, Sonf, Chitrak Mula, Bla, Dantiula, Rasot</i>	<i>Kustha</i>
3	<i>Manasheeladi Lepa</i>	<i>Manasheela, Hartal, Maricha, Sarson Taila, Arka Ksheer</i>	<i>Kustha</i>
4	<i>Kranj Bheejadi Lepa</i>	<i>Kranj Bheej, Chakramardh, Kuth, Gomutra</i>	<i>Kustha</i>
5	<i>Shweta Karviraadi Lepa</i>	<i>Shweta Karvir, Kutaj, Kranj, Daruharidra, Chameli</i>	<i>Kustha</i>
6	<i>Sarvkusthahar Lepa</i>	<i>Kajjali, Katu Taila</i>	<i>Kustha</i>
7	<i>Sarshapadi Churna</i>	<i>Sarson, Kranj, Haldi, Daruharidra, Manjistha, Triphala, Karchoor, Chandan, Shweta Sariva, Murva, Priyangu, Trikatu, Dalchini, Ela, Tejpatra, Nagkesar, Laksha</i>	<i>Kustha</i>
8	<i>Chitrakadi Taila</i>	<i>Shweta Kaner Swaras, Vayavidanga, Chitrak, Katu Taila</i>	<i>Kustha</i>
9	<i>Vajra Taila</i>	<i>Saptaparni, Kranj, Arka, Malti, Kaner, Snuhi, Shirish, Chitrak, Kranj, Triphala, Trikatu, Daruhaldi, Shweta Sarson, Vayavidang, Chakramardh, Gomutra, Sarson Taila</i>	All types of <i>Kustha</i>
10	<i>Manjisthaadi Taila</i>	<i>Manjistha, Kuth, Haldi, Chakramardh, Amaltas, Sarson Taila, Trun Swarasa</i>	<i>Kustha</i>
11	<i>Kasmarda Yog (Lepa)</i>	<i>Kashmarda, Sooveerphala</i>	<i>Dadru</i>
12	<i>Mulakbheejadi Yog (Lepa)</i>	<i>Mulak Bheej, Sarson Bheej, Laksha, Haridra, Daruharidra, Chakramard Bheej, Shreeveshtak, Sunthi, Maricha, Pippali, Vayavidanga, Kuth, Gomutra</i>	<i>Dadru</i>



13	<i>Aaragvadhpatra Yog (Lepa)</i>	<i>Aaragvadh Patra, Kanji</i>	<i>Dadru</i>
14	<i>Prupunnat Yog(Lepa)</i>	<i>Chakramard Bheej, Aamalaki, Rala, Snuhi, Sooveramal</i>	<i>Dadru</i>
15	<i>Vidangadi Lepa</i>	<i>Vayavidang, Chakramardh Bheej, Kuth, Haridra, Saindhav Lavan, Sarson, Dhanyamal</i>	<i>Dadru, Kustha</i>
16	<i>Laghumarichadi Taila</i>	<i>Maricha, Hartal, Manasheela, Nagarmotha, Arka Ksheer, Kaner Mula, Nishoth, Gobhar Rasa, Mahari, Kuth, Haridra, Daruhaldi, Devdaru, Lala Chandhan, Metha Visha:- Kalka Dravya Sarson Taila:- Sneha Gomutra:- Drava(Liquid)</i>	<i>Dadru</i>
17	<i>Dardadi Lepa</i>	<i>Hingul, Kajjali, Pippali, Metha Visha, Vaye Vidang, Haridra, Chitrak Mula, Maricha, Haritaki, Sunthi, Nagarmotha, Samudrafena, Bheej, Kutaki, Amaaltas Patra, Chakramardh Bheej, Neem Swarasa Or Kwatha</i>	<i>Dadru</i>
18	<i>Gunjaadi Udvartan</i>	<i>Gunja, Chitrakmula, Shankh Bhasma, Haldi, Durva, Haritaki, Kalihari, Snuhi, Saindhav Lavan, Ghritkumari Nagarmotha, Arka Ksheer, Bakuchi, Gruhdhoom, Chakramardh, Vayavidanga, Maricha, Madhu, Khajoor</i>	<i>Dadru</i>
19	<i>Lakshaadi Lepa</i>	<i>Laksha, Ral, Kuth, Haldi, Shweta Sarson, Trikatu, Mulibheej, Chakramardh</i>	<i>Kustha, Dadru</i>
20	<i>Bruhtmarichadi Taila</i>	<i>Maricha, Nisoth, Dantimula, Arkaksheer, Gobar Rasa, Devdaru, Haldi, Daruhaldi, Jatamansi, Kuth, Raktchandana, Mahri, Kaner, Hartal, Manasheela, Chitrak, Kutaj, Kalihari, Chavya, Vyavidanga, Chakramardh, Shirish, Nimb, Saptaparni, Guduchi, Snuhi, Amaltas, Kranj, Nagarmotha, Khadir Pippali, Vacha, Jyotishmati, Sarson Taila, Gomutra</i>	<i>Dadru, Kustha</i>
21	<i>Maheshvar Ghrita</i>	<i>Kajjali, Arka Ksheer, Manasheela, Shweta Jeera, Krushn Jeera, Haldi Daruhaldi, Godanti, Maricha, Nagabhasma, Chakramardh, Bakuchi, Ghrita</i>	<i>Kustha</i>

Table 15 Formulation in *rasa ratna samuchya* for internal use

S.No	Name of the formulation	Ingredients	Roga adhikar
1	<i>Krishnamanikya Rasa</i>	<i>Gandhak, Tikshna Loha, Kanta Loha, Abhrak Bhasma, Parad, Vatsnabh, Swarnamakshik Bhasma, Manjistha Kwatha</i>	<i>Kustha</i>
2	<i>Manjisthaadi Gan</i>	<i>Manjistha, Nagarmotha, Devdaru, Khadir Kastha, Triphala, Kuth, Vacha, Bakuchi Bheej, Patha, Katuki, Pittpapda, Amaltas Phalamajja, Yasthimadhu, Murva, Haldi, Trayaman Mula, Varahikand, Dhatur, Vidang, Vasamula, Nimb Twaka, Guduchi, Kutaj Twaka, Kakoli, Duralbha</i>	<i>Kusthahara gan</i>
3	<i>Tripurantak Rasa</i>	<i>Rasa Sindur, Vatsnabh, Sunthi, Vidanga, Dhatur, Yasthimadhu, Chitrak Mula, Patha, Nirgundi, Triphala, Vandhyakkaroti, Ridhi, Vridhi, Haldi, Daruhaldi, Goat Urine</i>	<i>All types of kustha</i>
4	<i>Kusthkuthar Rasa-1</i>	<i>Kajjali, Mundi Swarasa, Bhringraj Swarasa, Vacha, Amala, Pippali, Loha Bhasma, Vidyan, Vatsnabh, Tamra Bhasma, Sunthi, Shweta Jeera, Kuth, Chitraka, Triphala, Saindhav Lavan</i>	<i>All types of kustha</i>
5	<i>Kusthkuthar Rasa-2</i>	<i>Rasa Sindur, Gandhak, Loha Bhasma, Tamra Bhasma, Guggul, Triphala, Kuchla, Chitrakmula, Shilajeet, Karanjbheej</i>	<i>All types of kustha</i>
6	<i>Vyoshadi Gutika</i>	<i>Trikatu, Kajjali, Triphala, Chitrak</i>	<i>Kustha</i>
7	<i>Vajrashekh Rasa</i>	<i>Kajjali, Abhrak Bhasma, Swarnamakshik Bhasma, Aprajeta, Netrabhala, Sarpakshi, Shankpushpi,</i>	<i>All types of kustha</i>



		<i>Nili, Gojehva, Dugdika, Palash Bhej, Rudravanti, Jalvetas, Kakmachi, Satavari Kwath, Hasthikarna Palash, Guduchi Kwatha, Vrishchakali Kwath, Murva Kwatha, Vidarikandha Kwath, Dashmula Kwatha, Cow Ghee</i>	
8	<i>Dadrुकुष्ठविद्रवण रसा</i>	<i>Kajjali, Swarnamakshik Bhasma Hartal, Kantaloha Bhasma, Krishna Vajraabhrak Bhasma, Hingul, Yasthimadhu, Kuth, Guda, Amalvetas Kwath, Honey, Ghee</i>	<i>Kustha, Vicharchika, Dadru</i>
9	<i>Manikyatilak Rasa</i>	<i>Kajjali, Swarnamakshik Bhasma Hartal, Kantaloha Bhasma, Krishna Vajra Abhrak Bhasma, Hingul, Yasthimadhu, Kuth, Satavari Swaras, Manjistha Kashya</i>	<i>Kustha</i>
10	<i>Parhit Rasa</i>	<i>Kajjali, Swarna Bhasma, Atees, Vatsnabh, Vidang, Trikatu, Triphala</i>	<i>All types of kustha</i>
11	<i>Talkeshwar Rasa1</i>	<i>Parad, Naga Bhasma, Patra Hartal, Gomutra, Jambiri Nimbu Swaras, Kumara Swaras, Bhringraj Swaras, Snuhi Swaras</i>	<i>Dadru, Kustha</i>
12	<i>Talkeshwar Rasa 2</i>	<i>Kajjali, Hartal, Tamra Bhasma, Loha Bhasma</i>	<i>All types of kustha</i>
13	<i>Mahataleshwar Rasa1</i>	<i>Kajjali, Patra Hartal Swarnamakshik Bhasma, Manasheela, Saindhav, Tankan, Tamra Bhasma Loha Bhasma, Guggul</i>	<i>All types of kustha</i>
14	<i>Mahataleshwar Rasa2</i>	<i>Kajjali, Hartal, Manashela, Tankan, Saindhav, Tamra Bhasma</i>	<i>Kustha</i>
15	<i>Kusthnashan Rasa</i>	<i>Kajjali, Chitrakmula, Vhakuchi, Maricha</i>	<i>All types of kustha</i>
16	<i>Arogya Vardhini Rasa</i>	<i>Kajjali, Loha Bhasma, Abhrak Bhasma, Tamra Bhasma, Triphala, Shilajeet, Guggul, Chitrakmul, Kutaki</i>	<i>Kustha</i>
17	<i>Narayan Rasa</i>	<i>Rasa Sindur, Gandhak, Guggul, Triphala</i>	<i>Dukhsadhya Kustha</i>
18	<i>Medinisara Rasa</i>	<i>Rasa Sindur, Gandhak, Tamra Bhasma, Loha Bhasma, Trikatu, Vatsnabh</i>	<i>All types of kustha</i>
19	<i>Jantughni Vati</i>	<i>Kajjali, Mandur Bhasma, Ajmodha, Palash Bhej, Samudraphala, Jayaphala, Vidanga, Kuchla, Swarnamakshik</i>	<i>Kustha</i>
20	<i>Dhanvantri Rasa</i>	<i>Kajjali, Tamra Bhasma, Tankan, Kankustha, Rakta Chandan, Pippali</i>	<i>Kustha</i>
21	<i>Vajradhar Rasa</i>	<i>Rasa Sindur, Hartal, Hira Bhasma, Abhrak Bhasma, Swarna Bhasma</i>	<i>All types of kustha</i>
22	<i>Kasisbaddh Rasa</i>	<i>Rasa Sindur, Kasis, Arjuna Twaka Kwatha</i>	<i>Kustha, dadru</i>
23	<i>Treelokyavijaya Rasa</i>	<i>Kajjali, Vatsnabh, Hartal, Rudanti, Swarnakshiri Mul</i>	<i>All types of kustha</i>
24	<i>Sarvkusthantak Taila</i>	<i>Kajjali, Krishna Abhrak, Tutha, Nimb Taila, Karpas Bhej Taila, Malkanguni Taila</i>	<i>Kustha(external& internal both)</i>
25	<i>Kusthavidravan Taila</i>	<i>Bhakuch Kwatha, Kajjali, Loha Bhasma, Tila Taila, Tambhul Rasa</i>	<i>All types of the kustha(external& internal both)</i>
26	<i>Mahabhalatak Taila</i>	<i>Bhalatak, Tila Taila</i>	<i>All types of the kustha(internal and external both)</i>
27	<i>Sarvakusthankush Churna</i>	<i>Mushali, Vhakuchi, Nirgundi Mula, Honey, Ghee</i>	<i>All types of the kustha(orally)</i>

Table 16 Formulation in *rasa ratna samuchya* for external use

S.No	Name of the formulation	Ingredients	Roga adhikar
1	<i>Sarvkusthantak Taila</i>	<i>Kajjali, Krishna Abhrak, Tutha, Nimb Taila, Karpas Bhej Taila, Malkanguni Taila</i>	<i>Kustha(external& internal both)</i>



2	<i>Kusthavidravan Taila</i>	<i>Bhakuch Kwatha, Kajjali, Loha Bhasma, Tila Taila, Tambhul Rasa</i>	All types of the <i>kustha</i> (external& internal both)
3	<i>Vajra Taila</i>	<i>Snuhi Ksher, Arka Ksher, Dhaturpanchang Rasa, Chitrakmul Kwatha, mahisha mala Swarasa, Tila Taila</i> <i>Prakshep- Gandhak, Chitrak Mul, Manasheela, Hartal, Vidang, Ativisha, Vatsnabh, Tiktakoshatki, Kuth, Vacha, Jatamansi, Trikatu, Haldi, Daruharidra, Yasthimadhu, Sajji Kshara, Jeerak, Devdaru</i>	All types of the <i>kustha</i> (external)
4	<i>Mahabhalatak Taila</i>	<i>Bhalatak, Tila Taila</i>	All types of the <i>kustha</i> (external, internal both)
5	<i>Mahamartand Taila</i>	<i>Shakvriksha Bheej, Nimb Bheej Majja, Ankol Bheej, Chitrakmul, Amaltasphala Majja, Bibhitakphala Majja, Snuhi Ksher, Vhakuchi, Narikel Giri, Chirooji, Erandbheej Majja, Chakrmadh, Tila Taila, Kustha Churna, Nswana Kshirimul</i>	<i>Kustha</i>
6	<i>Kanchini Taila</i>	<i>Swarna Kshiri Taila, Kuth</i>	<i>Kustha</i>
7	<i>Kusthari Taila</i>	<i>Narikel Giri, Haldi, Daruhaldi, bakuchi Bheej, Vacha, Bhavitakibheej Majja, Bhringraj, Bhallatak Bheej, Shak, Dhatur Bheej</i>	18 types of <i>kustha</i>
8	<i>Mayurksharadi Lepa</i>	<i>Apamarg Kshara, Palash Kshara, Medhashringi Kwatha, Parade, Yavak Kshar, Sarjik Kshara, Tankan Kshar, Haldi, Trikatu, Daruharidra, Tamra Bhasm</i>	<i>Dadru</i>
9	<i>Kusthavidhvansan Lepa</i>	<i>Kajjali, Tankan, Tamra Bhasma, Pippali, Kuth, Rakta Chandan</i>	All types of the <i>kustha</i>
10	<i>Nirgundyadi Lepa</i>	<i>Nirgundi Mula, Sarson Taila, Madhu, Cow Ghee, Kumara Swaras, Gandhak, Jho, Semal Multwak Swaras</i>	<i>Kustha</i>
11	<i>Gunjadh Urvartan</i>	<i>Gunja Bheej, Chitrak, Shank Bhasma, Haldi, Bhallatak Bheej, Kalihari Mula, Snuhi Ksheer, Manasheela, Kumara Swaras, Meghnath, Ghriydhum, Parad, Gomutra, Chakramardh Bheej, Vidyang, Maricha, Madhu, Samudri Jala</i>	<i>Dadru, Kustha</i>

Table 17 *Malahar* mentioned in rasa tarangini

Rasa Tarangini	Formulation name	Ingredients	Rogadhikar
1	<i>Dadruvidravan malahar</i>	<i>Chakramardh, Laksha, sikta taila, gandhak, tankan</i>	<i>Dadru(cure in 7 days)</i>
2	<i>Talkodhya malahar</i>	<i>Sikta taila, kajjali, girisindur, garika manasheela, Hartal, Haritaki Katha</i>	<i>Dadru, Kustha</i>
3	<i>Sinduradho malahar 2</i>	<i>Sikta taila , rasa sindoor, Rala</i>	<i>Kustha,</i>

Table 18 Oral drugs used in fungal infection

Disease	Drugs	Dose	Duration
Tinea Capitis	Griseofulvin	20-25mg/kg/day	6-8 weeks
	Terbinafine	3-6 mg/kg/day	For trichophyton (black dot) 2-4 weeks



			For microsporum (gray patch) 4-8 weeks 4-6 weeks 20 days 8-16 weeks
	Itraconazole	3-5mg/kg/day	
	Fluconazole	6mg/kg/day 8mg/kg/once a week	
Tinea Barbae	Griseofulvin	1gm/day	4-8 weeks
	Terbinafine	250mg/day	2-4 weeks
	Itraconazole	200mg/day	2-4 weeks
	Fluconazole	200mg/day	4-6 weeks
Tinea Corporis/ cruris	Adults:		
	Griseofulvin	500mg/day	2-6 weeks
	Terbinafine	250mg/day	2 weeks
	Itraconazole	100mg/day	15 days
	Fluconazole	150mg/day	4-6 weeks
	Children:		
	Griseofulvin	10-20mg/kg/day	6 weeks
	Terbinafine	3-6mg/kg/day	2 weeks
	Itraconazole	5mg/kg/day	1 week
Tinea pedis / manuum	Adults:		
	Terbinafine	250mg/day	2 weeks
	Itraconazole	200mg twice daily	1 week
	Fluconazole	150mg/week	3-4 weeks
	Children:		
	Itraconazole	5mg/kg/day	2 weeks
Onychomycosis/ tinea unguium	Terbinafine	250mg/day	For fingernails: 6 weeks For Toenails: 12 weeks
	Itraconazole	200mg/day or 400mg/day for 1 week in 1 month	For fingernails: 6 weeks continuous therapy or 2 pulses For toenails: 12 weeks continuous therapy or 3 pulses
	Fluconazole	Not recommended	For fingernails: More than 4 months
	Griseofulvin	500mg/day	For Toenails: More than 1 year

Table 19 Topical ointments used in fungal infection

Preparations	Comments
AZOLES	
Clotrimazole: 1% cream, lotion and powder	Fungistatic, but effect is broad spectrum
Miconazole: 2% cream, gel, lotion and powder	Effective against dermatophytes, candida, and Malassezia furfur
Econazole: 1% cream	
Ketoconazole: 2% cream, shampoo	
Oxiconazole: 1% cream and lotion	
Bifonazole: 1 % cream	
Fluconazole: 0.5% gel	
Sertaconazole: 2% cream	
Sulconazole: 1% cream	
ALLYLAMINES	
Terbinafine: 1% cream	Fungicidal
Butenatine: 1% cream	Effective against dermatophytes and Malassezia furfur.
Amorolfine: 5% lacquer, 0.25% cream	
Others	



Tolnaftate: 0.1 % lotion.

Ciclopirox olamine: 8% lacquer

Whitfield's ointment (salicylic acid 3% and benzoic acid 6%)



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