

TRIBHUVAN KIRTI RAS: AN UPDATED REVIEW

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ABSTRACT

Herbo-mineral drugs are known for their quick action in lower dosages, and Tribhuvan Kirti Ras is one of the most commercially used herbo-mineral medicines in Jwara. It is a combination of 7 ingredients, which include 2 minerals, 4 herbal and 1 poisonous drug, and is potentiated with 3 Bhavana Dravya. Its ingredients are purified Hingula (*Cinnabar*), purified Tankan (*Borax*), purified Vatsnabha (*Aconitum ferox* Linn.), Sunthi (*Zingiber officinale*), Maricha (*Piper nigrum* Linn.), Pippali and Pippalimula (fruit and root of *Piper longum*), and Bhavana Dravya includes swaras of Tulsi (*Ocimum Sanctum* Linn.), Ardrak (*Zingiber officinale* Rosc.), Dhatura Patra (*Dhatura metal* L.), Nirgundi (*Vitex negundo* Linn.), and it comes under the category of *Kharaliya Rasayan* and is taken with honey, Ardarak swaras, and Tulsi swaras. An attempt has been made to collect all the information related to pharmacological properties, experimental studies, and clinical studies conducted on Thribhuvan Kirti Ras till now that is available in different databases.

Key words: Tribhuvan Kirti Ras, Jwar, Herbo-mineral drug

INTRODUCTION

Tribhuvan Kirti Ras is among the pioneers of Herbo-mineral Ayurvedic medicine. Herbo-mineral drugs are used in lesser doses and have quick action, better palatability, tastelessness, and a prolonged shelf life.¹ Since consumers in the modern world seek quick-acting treatments with fewer side effects, herbo-mineral pharmaceuticals are the recommended treatment in this circumstance. The only issue with using these formulations is their improper manufacturing processes, which raise questions regarding their quality and safety. Tribhuvan Kirti Ras is among the best-acting and one of the most commercially used medicines in Ayurveda. It is mentioned in various Ayurvedic texts²⁻⁴ and also used widely by different Vaidyas in Jwara. It is also widely used during COVID-19 as recommended by AYUSH in uncomplicated cases with fever with severe symptoms of COVID-19 in a dose of 125mg BD after food with Shunthijal or water⁵. In Ayurveda, it is mentioned in most of the Rasashastra texts, such as Yogratnakar in Visham Jwarachikitsaadhyay², Rasatanrasaar va siddhprayogsangrah⁶, Bharat Bhaisajya Ratnakar Rasyogsagar, and AFI. There are 3 Pathbheda of Tribhuvan Kirti Rasa with differences in their contents, bhavana dravya, method of preparation, dosage, anupan, uses, etc. mentioned in ayurvedic texts, but the commercially used one, which is mentioned in Yogratnakar, is used for Sannipataj jwar. Another Pathbheda varies from the first and is not available in the market used in Udar vyadhi⁷. Tribhuvan Kirti Rasa According to Bharat Bhaisajya Ratnakar and Yoga Ratnakar, contains purified Hingula (Cinnabar), purified Tankan (Borax), purified Vatsnabha (*Aconitum ferox* Linn), Sunthi (*Zingiber officinale*), Maricha (*Piper nigrum* Linn), Pippali and Pippalimula (fruit and root of *Piper longum*), and Bhavana Dravya includes swaras of Tulsi (*Ocimum Sanctum* Linn.), Ardrak (*Zingiber officinale*), and Dhatura Patra (*Dhatu- ra metal*). According to AFI Part 1 and Rasamritam Yoga Vigyaniya, the ingredients, are the same as mentioned above, but the addition of Nirgundi (*Vitex negundo* Linn.) as a bhavana dravya is indicated. It is

taken with honey, Ardarak swaras, and Tulsi swaras as anupan and used in all 13 types of Jwara,² especially Vata-shleshmika jwar, Sannipatik Jwara, and Tarun jwar.⁸

Jwara: Jwara is said to be the 'king' of all diseases, and it affects each and every living being, and occurs in every stage of life,⁹ and mentioned in Ayurveda as a disease and symptom. Several ayurvedic literatures have references to Jwara, and it is first mentioned as 'Takman' (which makes life miserable) in Athurveda. & Garud Purana has also some references to Jwara. The main cardinal feature of Jwara is 'Deh-indriya-mana-santapah (rise in body temperature with psychological and sensorial disturbances)⁹. The causative factors of Jwara include Vata, Pitta, Kapha, Vata-pitta, Vata-kapha, Pitta-kapha, Vata-pitta-kapha, and Agantuja. The main dosha involvement in Jwara is Pitta Pradhan Tridosha, and the main dushya is Rasadhatu and koshtagni when prakupit dosha is accumulated with Rasdhatu there is Swedovahsrotodushti, and propagation of doshas in the whole body along with rasa dhatu leads to elicitation of koshtagni from amashaya, due to which mandagni leads to amadosha and Santap.

Tribhuvan Kirti Ras potent drug for Jwara: Tribhuvan Kirti Ras, a potent herbo-mineral formulation, has been used for ages in the context of all types of Jwara.² It is a combination of 7 drugs of which 2 are minerals and 1 is poison; the other are herbal drugs, and regarding bhavana dravya, different acharyas have different opinions, and these bhavana dravya potentiate this yoga.

Dose :125 to 250 mg¹² Anupana: Honey, Ardraka rasa, Tulsi rasa¹²

Method of preparation:

In Rasamratam, the preparation process is described in, chapter 9:80-801/2. Shodita Hingula is first taken in a clean khalwa yantra and properly ground. Then, Vatsanabha is added, then Trikatu and, then Tankana further on, and finally, Pippali is added, again with additional dry grinding, until a homogenous mixture is obtained. The above-mentioned mixture was then

completely submerged in tulsi swaras before being given bhavana (wet trituration) until it dried completely. Three times over the course of a few days, the tulsi swaras bhavana was given. After the Tulasi swaras bhavana, ardraka swaras were added and given three bhavanas, and then Dhatura swaras were added for an additional three bhavanas. It is important to use caution when it is carried out, trituration is done until it dries completely. After that, 125 mg (1 gunja) of Tribhuvan Kirti rasa was prepared as vatis, which were then allowed to dry in the shade. The colour of these vatis is red.

MATERIAL AND METHODS

The content of this article has been compiled and updated from various Ayurvedic textbooks and search engines like Google Scholar, Research Gate, PubMed, and other articles available online. This review mainly focuses on various modern published research and studies till now on this formulation.

Table 1. Different names of ingredients and their composition¹³

INGREDIETS NAME	ENGLISH NAME	HINDI NAME	BOTANICAL NAME	PART USED
Vatsanabh ¹³	Aconite, Monk's hood	Vachnabh, meethavish, meetha teliya	<i>Aconitum ferox</i>	1 part
Hingula	Cinnabar	-	<i>Cinnabar</i>	1 part
Tankan	Borax, Tincal	Suhaga	<i>Borax</i>	1 part
Sunthi ¹⁴	Ginger	Sonttah	<i>Zingiber officinale</i>	1 part
Maricha ¹⁵	Black pepper	Kali maricha	<i>Piper nigrum</i>	1 part
Pippali ¹⁶	Indian long pepper	Pippal	<i>Piper longum</i>	1 part
Pippalimula ¹⁶	Indian long pepper	Pippal	<i>Piper longum</i>	1 part
Bhavana dravya				
Tulasi swaras ¹⁷	Holy basil	Tulsi	<i>Oscimum sanctum</i>	Q. S
Ardrak swaras ¹⁴	Ginger	Sonttah	<i>Zinziber officinale</i>	Q. S
Dhatura patra swaras ¹⁸	Thorn apple	Dhatura	<i>Dhatura metal</i>	Q. S
Nirgundi patra swaras ¹⁹	Five-leaved chaste	Samhalu, mewadi	<i>Vitex negundo</i>	Q. S

The equivalent concepts in modern pharmacology to those in ayurvedic pharmacology are Rasa (Taste), Guna (Properties), Virya (Active Principle), Vipaka (Biotransformation), Prabhava (Specific Activity), and Karma (Action). These concepts determine the pharmacological action of any medicine.

Table 2. Pharmacological actions of Ingredients

Aushadh dravya	Rasa	Virya	Guna	Vipaka	Doshagnata	Rogaghanata	Karma (API)
Vatsanabh ¹³	Madhura	Ushna	Laghu, ruksha, tikshna, vyavayi, vikasi	Madhur	Tridoshghna esp. Vatakaphahar,	Vednasthapan, sothhar, svedjanan, rochan, deepan, pachan, Hridayottejak, mutrajanan,	Tridoshahar,rasayan, svedala ²⁰
Hingula ²¹	Tikta, Katu, kashaya	Ushna	Ushna	Katu	Kaphapittahari ²²	Sarvadoshaghna. Deepan, rasayan, Vrishya, balya, Vajikaran, santatikal, ruchikar, netrya, hridayutsahkar	Not mentioned
Tankan ²³	Katu ²³	Ushna	Ruksh, Tikshna, guru	Katu ²⁴	vatakaphagna	Kasa, svasa, vatarog, sthavaravisa, adhman, vrana.	Hrdya, balya, sarak, kaphanissarak, deepan, stripushpanana, mudhagarbhpravartak.
Sunthi ²⁵	Katu	Ushna	laghu, snigdha	Madhur	Kaphavatahamak	Agnimandhya, Svasa, adhman, amavata, pandu, udararoga	Anulomana, Deepan, Hrdya, Pachana, Vatakaphapaha, asmadosa ²⁵
Maricha ²⁶	Katu	Ushna	Lagu, tikshna,	Katu	Kaphavatahaman	Svasa, shool, krimirog, tvakrog	Chedan, deepan, jantunashan, medohar, chedi, hrdrog, vataroga. ²⁶
Pippali ²⁷	Katu	Anushan sheet	Laghu, snigdha, tikshna	Madhur	Kaphavatahara,	Svasa, kasa, pliharog, gulma, Jwara, prameh, arsha, kshay, udarog, hikka, trhsna, krimi, kushta, shool, amavat, amadosha, ²⁷	Deepan, ruchya, rasayan, hrdya, vrsya, Tridoshar, rechan
Pippalimula ²⁸	katu	Ushna	Laghu, ruksha,	Katu	Kaphavatahara,	Udarroga, anaha, gulma, krimirog, vatarog	Deepan, Pachan, Vatoanulomana, shoolprashamana, ruchya ²⁸
Tulsi patra swaras ²⁹	Katu, tikta	Ushna	Laghu, ruksha	Katu	kaphavatahara	Svasa, kasa, pratishyay, prashvashula, aruchi, hikka, krimirog, kushta	Deepan, hrdya, krimighna ²⁹
Ardrak swaras ³⁰	katu	Ushna	guru, ruksha, tikshna	Katu	Vata-kaphahara,	Vibhandh, anaha, shool, soph, kantrog	Rochana, deepan, bhedana, svarya, hrdya, vrshya ³⁰
Dhatra patra swaras ³¹	Tikta Katu	Ushna	Laghu, ruksha, vyavayi, vikasi	Katu	Kaphavatahar	Agnimandya, Anidra, Atisara, Klaibya, Grahnirog	Deepan, Grahi, kaphahara, nidrajanana, pachana, vajikaran, shukravardhana, vyavayi ³¹
Nirgundi swaras. ³²	Katu, tikta	Ushna	Laghu, ruksha	Katu	kaphavatahaman	Shool, soph, vatavyadhi, amavata, kushta, kandu, kasa, pradara, adhmana, pliha roga, gulma, aruchi, krimi, vrana, nadivrana, karnasula, sutika Jwara. ³²	sophahara, keshya, chaksusya, visaghna, smritiprad, anuloman.

Table 3. Chemical constituents of Ingredients and their Pharmacological actions

Ingredients	Chemical Constituents (PV Sharma Part 2)	Pharmacological action
<i>Vatsanabh</i>	Pseudo-Aconitine, Aconitine, Picoaconine, benzoyl aconine, homonepeline	Analgesic, spasmogenic, diaphoretic, diuretic, sedative, anodyne, hypotensive, cardiac stimulant, antidiarrhoeal. ³⁴
<i>Hingula</i>	Mercury & sulphur	
<i>Tankana</i>	Borax	Anti-microbial ³⁵ , anti-inflammatory ³⁶
<i>Shunthi</i>	Gingerin, Gingerol, Shogaol, Oleoresin, Zingerone.	Anti-inflammatory, analgesic, antioxidant, antipyretic, antibacterial, antifungal, antiulcer, hepatoprotective, antiemetic ³⁷
<i>Maricha</i>	Piperine (5-10%), Piperidine (5%), Piperettin & Chavicine, Volatile oil (1-2.6%)	Anti-inflammatory, Antioxidant, analgesic, muscle relaxant, antipyretic, antifungal, hepatoprotective, anti-microbial, anti-bacterial, antiulcer ³⁸
<i>Pippali</i>	Piperine (4-5%), Piplartine, Sesamin, Piplasterol	Analgesic ³⁹ , anti-inflammatory ⁴⁰⁻⁴² Immunomodulatory activity, hepatoprotective activity, bioavailability enhancer, antiulcer, antifungal, anti-obesity, anti-arthritis, ⁴³
<i>Pippalimula</i>	Piperine (0.15-0.18%), Piplartine (0.13-0.20%), Piperlaungminine, steroid, and glycosides.	Analgesic ³⁹ Antimicrobial activity ⁴⁴ , Antioxidant activity ⁴⁵ Antifertility activity ⁴⁶ ,
<i>Tulsi</i>	Volatile oil (0.1-0.23%), Phenol (45-76%), Aldehyde (15-25%), fixed oil (17.8%), glycosides, and tannins.	Antiviral, antifungal, antibacterial, antiasthmatic, antistress, antispasmodic, antipyretic, anti-inflammatory, antioxidant, antitumour, anticancer, ⁴⁷
<i>Aadrak swaras</i>	Gingerin, Gingerol, Shogaol, Oleoresin, Zingerone	Anti-inflammatory and Anti rheumatism. ⁴⁸ Anticancerous ⁴⁹ Anti osteoarthritis ⁵⁰ Antioxidant action ⁵¹
<i>Dhatura patra</i>	Scopolamine, Hysciamine, Atropine, Norhyosciamine, Meteolodine, volatile oil (0.045%), and fixed oil (16.3%) in leaves.	Antispasmodic, analgesic, antihelminthic, anticancer, anticholinergic, antiviral, nematicidal ⁵²
<i>Nirgundi patra swaras</i>	Volatile oil, oleoresin	Anti-inflammatory, anti-bacterial, antispasmodic, analgesic, antiarthritic, antimicrobial, diuretic, antifilarial, anticonvulsant ⁵³

ANALYTICAL PARAMETERS

Organoleptic analysis⁵⁴

Colour	Smell	Touch	Taste
Brown	Faint	Hard	Acrid

Physico-chemical Characterization of formulation⁵⁴⁻⁵⁵

Physico-chemical Parameter Values includes Total ash content of the formulation i.e.15.81% , similarly Mercury content :10.21%, Sulphur content:1.93%, Borax (as Na₂B₄O₇):9.77%, Total oil content: 0.30%, Total alkaloid content: 0.02%, Loss on drying at 110 degree C:13.20%, pH of 1% w/v extract at 24 degree C:8.40, Ash value: Not less than 16.21% w/w and Not more than 16.26% w/w, Acid

insoluble ash: not less than 0.9% w/w & Not more than 1.6% w/w, Volatile matter: not more than 5.9% w/w⁵⁵

Analytical Studies: A study was conducted in a self-prepared and market sample of Tribhuvan Kirti Ras to compare HPLC analysis of different samples. In total, three samples were prepared, and three samples were purchased from the market. Among the three prepared samples, two samples were prepared using different shodhana media, and one sample was prepared using impure ingredients. Alka-

loids are present in all samples, however, there was a decrease in the concentration of detected alkaloids after purification and it was concluded that the Shodhan procedure reduced the toxic principle (Aconitine) present in the market and a self-prepared sample of Tribhuvankirti Rasa. In addition, flavonoids, glycosides, and antioxidants are found which are beneficial for health⁵⁵.

EXPERIMENTAL STUDIES

Antioxidant activity: The five commonly used ayurvedic preparations Sitopaladi Churna, Laxmi Vilas Ras, Tribhuvankirti Rasa, Ajmodadi Churna, and Agnitundi Vati were studied to assess their antioxidant activity in comparison to gallic acid (standard) using the in-vitro reducing power method and their superoxide radical scavenging activity using the dimethyl sulfoxide method (IC50). This study concluded that these ayurvedic preparations including Tribhuvan Kirti Rasa possess significant radical scavenging activity and antioxidant properties and Laxmi Vilas ras shows higher radical scavenging activity and antioxidant properties among them⁵⁶.

Acute toxicity studies: a) A comparative acute toxicity study of a self-prepared and market sample of Tribhuvan Kirti Rasa was evaluated in which two samples of Tribhuvan Kirti Rasa were taken one from the market and other self-prepared and these were accessed to evaluate their acute toxicity in wistar strain albino rats. This study resulted in both self-prepared and market samples of Tribhuvan Kirti Ras does not show any toxic result at TED×4 dose level, and it was concluded that self-prepared Tribhuvan Kirti Rasa is safer than the market sample of Tribhuvan Kirti Rasa and in case of its therapeutic dosing its safer to use it up to four folds as per the condition⁵⁷.

b) Similar acute toxicity study of Tribhuvana Mishrana (TM) in a wistar strain of albino rats was done for 14 days. Tribhuvan Mishrana is a combination of three drugs (Tribhuvan Kirti Rasa, Godanti Bhasma, and Sudarshan Ghanvati) and it was subjected to an acute toxicity study after procedures like Shodhan (purification), Marana (Calcination), and Bhavana(lavigation). Criteria of assessment include be-

haviour changes, hematological changes, and histopathological changes. This study resulted in that TM was found to be safe and there were no signs of toxicity found in rats all hematological parameters were found to be within limits and histopathological study of different organs revealed cytoarchitecture⁵⁸. Microbial activity on available commercial Tribhuvan Kirti Rasa: A study was conducted on locally available commercial Tribhuvan Kirti Ras to assess the pathogenic proliferation in it. Three samples of Tribhuvan Kirti Ras were collected from retailers and randomly coded and culture media were procured for microbial evaluation. It resulted in all three samples of Tribhuvan Kirti Ras (S₁, S₂, S₃) showing Total Viable aerobic count (TAVC) Within the prescribed limit mentioned of 10⁵ CFU/g by WHO. The TVAC was found to be 9.3×10⁴, 4.5×10⁴ and 5.8×10⁴ CFU/g in three samples respectively and there is contamination found in all the samples with the fungi species of Gliodium, Populospora, Geomyces, and Rhizopus as well as Gram-positive and Gram-negative bacteria. All of the samples were contaminated with E. coli, which does not meet acceptable levels of microbiological characteristics or pharmaceutical standards⁵⁹.

Antibacterial activity: Anti-bacterial comparative study was conducted on Tribhuvan Kirti Rasa(yogratnakar) and Tribhuvan Kirti ras (AFI) mentioned in yogratnakar which is devoid of bhawana of *Nirgundi patra swaras*. In this study, aqueous and methanol extracts of samples were prepared in fine powdered form and for assessment introduced respectively through the 'Disc diffusion method & well method'. Tribhuvan Kirti ras (AFI) shows greater inhibition in comparison to Tribhuvan Kirti ras prepared by the method mentioned in yogratnakar. The aqueous extract of the formulation does not show antibacterial activity and the Methanol extract shows activity against Staphylo. aureus bacteria. In powdered samples, staph aureus and salmonella typhi was moderately and highly sensitive respectively⁶⁰.

CLINICAL STUDIES

Antipyretic Case Study: A Single observational innovative case study was done on a 40 yr female pa-

tient suffering from non-healing fever along with other symptoms for 2 weeks. The patient's general condition was weak and febrile, and the findings were Daourbalya, Aasyavairasyata, Samata & Daha. In routine laboratory investigations, all the parameters were within normal limits except the Hb count which was decreased, and the TLC count which was raised. Widal and Blood Smear tests were both negative. Assessment on the basis of subjective and objective parameters was done for 7 days and after treatment of 7 days with Tribhuvan Kirti Rasa there was marked improvement in the symptoms of patients⁶¹.

Combined therapeutic study: A Randomised Clinical trial was conducted on 30 patients between the age group of 18-62 yr suffering from uncomplicated chronic Sinusitis to assess the efficacy of medicine comprising. Inhalation of steam of Dashmula kwath (*Decoction*) along with Tribhuvan Kirti rasa followed by Nasya (*intranasal instillation*) with Anu Tailam. In this study, it was given at a dose of 250 mg BD with adrak swaras (Juice of ginger). Steam inhalation of Dasmula Kwath for 15 min was given 2 times a day followed by Anu tail nasya at a dose of 4 drops in both nostrils. The duration of the treatment was from 45 days to 90 days and patients were examined clinically every week. The study resulted in a clinical efficacy of 96.6%, and this combination is well tolerated, safe, and effective in adults with uncomplicated sinusitis and no adverse reaction were reported⁶².

DISCUSSION

Tribhuvan Kirti Rasa, a Herbo-mineral formulation contains different ingredients rich in flavonoids, glycosides, and antioxidants which are beneficial for health. Shodhan (purification) process makes its active principle such as the aconitine of vatsnabh, and minerals like Hingul and tankan less toxic. Tribhuvan Kirti Rasa's constituents have Katu, Tikta, Kashaya Rasa, Laghu, Ushana, and Tikshana Guna, as well as Ushana Virya, Katu Vipaka, and vatakaphahar Karma. Tribhuvan Kirti Rasa, therefore, acts with the aid of its Vatakaphahar Karma. Its in-

redients actively work on all types of jwara and most of the ingredients are jwaraghna and have antipyretic action. Amadosha and mandagini are two of the major causes of jwar. The amadoshahar properties of Pippali, Pippalimula, Maricha, and Sunthi assist and relieve amadosha, and further Jathragni is stimulated and increased which helps in digesting ama and doshas.

Vatsnabh is Visha dravya and acts as Yogavahi and accelerates the overall action of Tribhuvan Kirti ras. It has properties like Rasayan (rejuvenating) Balavardhanam (improves strength and immunity), jwarahara (useful in fever), and Shirashool (headache). It releases srothoavrodh through its swedjanan activity, and Jwara is further helped by its diaphoretic and analgesic properties. Tankan is an antidote for vatsnabh, counteracting the toxic effects of vatsnabh, and is itself an agnideepak and vishnashak with anti-microbial and anti-inflammatory properties. Hingula is yogvahi, that is when it is combined with any other drug, the combined drug's properties are enhanced. Moreover, along with other drugs, Hingula reaches the cellular level because of the Sukshama Srotogamitva property. It is also sarvadoshhar, and its deepan property aids in agnideepan. Sunthi is an amapachak and acts as an analgesic, an antipyretic, an anti-inflammatory, an antibacterial, and an anti-fungal. Maricha (Piper Nigrum) is regarded as pramathi, which implies it aids in clearing congestion at the microcellular level. Pippali (Piper Longum), which is considered to be dipani and pachani, and pippalimula having anahprashman action helps in regulating the amadoshajya lakshanas and aids in Ama digestion. These drugs have anti-inflammatory, analgesic, and antipyretic, anti-bacterial action which aids the potency of this formulation. Tulsi swaras, one of the bhavana dravyas, have jwaraghna activity, ardarak swaras is amapachan, and dhatura patra swaras accelerate the action of the formulation. Nirgundi svrasa with its Vatahar property decreases the pain in the body. These bhavana dravyas potentiate this yoga synergistically. Due to the qualities of these components, Tribhuvan Kirti Rasa is a highly effective

medicine used in all varieties of jwar. It also shows anti-bacterial activity i.e Methanol extract of Tribhuvan Kirti Rasa shows activity against Staph. Aure's bacteria and in powdered samples staph aureus and salmonella typhi was moderately and highly sensitive respectively. Therapeutically it is used in Jwara as an antipyretic and along with a combination of Dashmool kwath in chronic sinusitis. It possesses significant radical scavenging activity and antioxidant properties which make it a more potent medicine. Herbo-minerals formulations always have safety-related issues, from above mentioned toxicity studies it is evident that it is safer to use as a single drug and in combinations also. Tribhuvan Kirti Rasa is a medication that doctors frequently use, but according to the study mentioned above, the market samples are not up to par quality because they contain pathogens from various microbes, and one possible cause of this is that manufacturing standards weren't upheld, so it should be used cautiously after quality control. Overall, this formulation is potent and safe medicine used in all types of jwar, but quality standards should be kept in mind while using it clinically.

CONCLUSION

Ayurvedic texts, different search engines, and research are all ways of re-evaluating what is already known. Despite the fact that this formulation is well-liked by doctors, little study has been done on its standardisation, experiments, and clinical trials. Tribhuvan Kirti Rasa is a commonly used medication, but before using it, one should consider the commercial quality of the formulation because it contains toxic herbo-minerals and if low-quality medication is used, the medicine's potency will be compromised, and it won't have the desired therapeutic effect. An attempt has been made to consolidate and update all the information and studies related to this formulation from different databases and available resources, Researchers can utilise this

knowledge for additional investigations and research.

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