Avant Grade Step towards the Management of Jvar (Fever) with Special Reference to Priya Nighantu

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Abstract Plants are the exclusive source of the drugs for the treatment of the diseases; millions of peoples are dependent upon herbal medicines. Acharya Priyavrata Sharma enumerates various drugs acting on jvar (fever) in his book Priya nighantu. Jvar may be a symptom in some disease, or it may be a disease itself. Almost all the human beings have experienced this disease in one or the other way. Many treatment methods have been mentioned in different Ayurvedic texts. The present study targets to screen drugs acting on jvar and their clinical importance. 70 drugs out of total 452 drugs approximately are described with jvarhar property throughout the text which includes herbal, mineral and animal origin drugs and compound formulations.

Keywords: Fever; Herbal; Jvar; Priya nighantu.

1. Introduction

Ayurveda embraces the knowledge of different facets of life as described in the following verse – “Tatrayusceti cetanuvrith jivitam anubandho dhari cha” i.e., Ayu and term Veda denoting knowledge (Sastri, 2011). Thus perfect health in Ayurveda is described as to one having doshas, agni and functions of dhatu and malas in a state of equilibrium and has cheerful mind, intellect and sense organs is termed as Svastha (health) (Sharma, 2010). In order to achieve such state Ayurveda adopted three treatment methods among which Yuktiyapasraya deals with the treatment of drug materials. Dravyaguna vigyana is the section of Ayurveda dealing with the drug sources which is divided into Nama, Rupa, and Gyana which represents the understanding of Aushadi (drug material). Nighantu can be considered as one of the important aspect in study of Ayurveda. As study of the Nighantu has not given much significance but, they are as ancient as Ayurveda. It contained synonyms which describes about different aspects of herbs and thus expose their hidden meanings.

The word Nighantu is based on term ‘Nigama’ as stated, “Nighantwa kasmata, Nigama ime bhavantii” which brings out extremely concealed or secret meaning of words (Lucas, 2009). The ancient nighantas were like kosa, containing the synonyms of dravya but later properties, actions and uses of dravya were described which became popular. Priya Nighantu is written by Prof. Priyavrata Sharma.
published in 1983. In order to overcome the controversies on opinion about the drugs and their synonyms and action, Priya Nighantu was written in simple words to give a clear picture about the dravya.

According to recent studies of healthy individuals 18 to 40 years of age, an A.M. temperature of >37.2°C (98.9°F) or a P.M. temperature of >37.7°C (98.9°F) would define a fever. Fever can be caused by abnormalities in the brain itself or by toxic substances that affect the temperature-regulating centres. Some causes of fever are bacterial diseases, endocrine abnormalities, connective tissue disease, neoplasm, brain tumours and environmental conditions etc. (Gyton and Hall, 2010).

This paper traverses the dravya in Priya Nighantu especially with jvarhar property. Jvar (fever) is known to be chief among diseases. Among the diseases described by Acharya Charak, Jvar (fever) is mentioned first because of its being the earliest in appearance of the somatic diseases. Also, Acharyas have said at the time of janma (birth) and mrityu (death) jvar is seen (Sastri, 2010).

According to Ayurvedic mythology jvar is originated from Rudrakopa (anger of lord shiva) and production of lobha and parigraha thus afflicting body, senses and mind being oldest among all diseases and severe (Sastri, 2011). Jvar effects both sharira (body) as well as manas (mind) (Sastri, 2011). Effects of fever are santap (pyrexia), aruchi (anorexia), trishna (thirst), angmarda (bodyache), and hridya vyatha (distress in cardiac region) (Sastri, 2011).

2. Materials and Methods

Screening of each and every varga of Priya Nighantu is done for plants having a role in treatment of different types of jvar as mentioned:

| No. | Name of Varga     | Total no. of Jvarhar | Drugs                                                                 | Percentage (%) |
|-----|-------------------|----------------------|----------------------------------------------------------------------|----------------|
| 1   | Haritakyadvarga   | 19                   | Amalaki, Agnimantha, Prishnaparni, Brihati, Kantakari, Laghu panchmoola, Dashmoola, Lavanga, Nagakeshar, Karkatashrini, Kataphala, Rudraksha, Saptaparna, Nimba, Parijaata, Kantakikaranja, Narikela, Parushaka, Dadima | 16.52          |
| 2   | Pippaliadvarga    | 9                    | Ardraka, Patha-Rajapatha, Vidaari-Ksheervidaari, Patola, Devadaali, Draksha, Karavellaka | 23.68          |
| 3   | Satpushpavadarga  | 22                   | Satpushpa, Aranyajeeraka, Dhanyaka, Methika, Usheera, Mushta, Upala, Mudparni, Parnichatushya, Kalmegha, Sahdevi, Parpata, Vasa, Tulsi, Katuka, Sarpagandha, Rashna, Yavasa-Dhanwayasa, Dronapushpi, Vatsanabha, Datura | 19.29          |
| 4   | Sharadavarga      | 8                    | Vansharochna, Sprikka, Vetasa, Trayamana, Murva, Gojihva, Shaivala, Yuthika | 10.25          |
| 5   | Suvarnadivarga    | 6                    | Abraka, Hingula, Malla, Godanti, Dugdhapasana, Sphatika               | 16.66          |
| 6   | Shaak varga       | 6                    | Agastiyapushpa, Shobhanjana phala, Karchari, Shalyama, Kevuka, Chatraka | 11.11          |
### Table 2: Jvarhar drugs in Priyanighantu of herbal origin with respective references

| No. | Drug name     | Botanical name                  | Family            | Action of drug | Reference         |
|-----|---------------|---------------------------------|-------------------|----------------|-------------------|
| 1   | Amalaki       | *Emblica officinalis* Gaertn.    | Euphorbiaceae     | Jvarhar        | P.N. Har.1/8      |
| 2   | Agnimantha    | *Premna mucronata* Roxb.        | Verbenaceae       | Jvarhar        | P.N. Har.1/29     |
| 3   | Prishniparni  | *Urina picta* Desv.            | Papilionaceae     | Jvarhar        | P.N. Har.1/35     |
| 4   | Brihati       | *Solanum indicum* Linn.         | Solanaceae        | Jvarhar        | P.N. Har.1/38     |
| 5   | Kantakari     | *Solanum surratense* Burm. F.   | Solanaceae        | Jvarhar        | P.N. Har.1/41     |
| 6   | Lavanga       | *Syzgium aromaticum* Linn.      | Myrtaceae         | Jvarhar        | P.N. Har.1/87     |
| 7   | Nagakeshar    | *Mesua ferrea* Linn.            | Guttiferae        | Jvarhar        | P.N. Har.1/99     |
| 8   | Karkatashringi| *Pistacia integerrima* Stewart ex Brandis. | Anacardiaceae     | Jvarhar        | P.N. Har.1/147    |
| 9   | Kataphala     | *Myrica esculenta* Buch-Ham.    | Myricaceae        | Jvarhar        | P.N. Har.1/149    |
| 10  | Rudraksha     | *Elaeocarpus ganitrus* Roxb.    | Elaeocarpaceae    | Jvarhar        | P.N. Har.1/155    |
| 11  | Saptaparna    | *Alstonia scholaris* R.Br.      | Apocynaceae       | Vishamjvarhar  | P.N. Har.1/169    |
| 12  | Nimba         | *Azadirachta indica* A.Fuss.    | Meliaceae         | Kaphapitta jvarhar | P.N. Har.1/180  |
| 13  | Parijaata     | *Nyctanthes arbor-tristis* Linn.| Oleaceae          | Jeernajvarhar  | P.N. Har.1/199    |
| 14  | Kantakikaranja| *Caesalpinia crista* Linn.      | Leguminosae       | Vishamjvarhar  | P.N. Har.1/211    |
| 15  | Narikela      | *Cocos nucifera* Linn.          | Palmae            | Jvarhar        | P.N. Har.1/231    |
| 16  | Parushaka     | *Grewia asiatica* Linn.         | Tiliaceae         | Jvarhar        | P.N. Har.1/235    |
| 17  | Dadima        | *Punica granatum* Linn.         | Punicaceae        | Jvarhar        | P.N. Har.1/236    |
| 18  | Aadraka       | *Zingiber officinalis* Roscoe.  | Zingiberaceae     | Jvarhar        | P.N. Pip.2/7      |
| 19  | Patha         | *Cissampelos pareira* Linn.     | Menispermaceae    | Jvarhar        | P.N. Pip.2/21     |
| 20  | Rajapatha     | *Stephania hernandifolia* (Wild) Walp. | Menispermaceae    | Jvarhar        | P.N. Pip.2/22     |
| 21  | Vidaari       | *Pueraria tuberosa* DC.         | Fabaceae          | Jvarhar        | P.N. Pip.2/45     |
| No. | Name               | Scientific Name                        | Family             | Journal   | Page |
|-----|--------------------|----------------------------------------|--------------------|-----------|------|
| 22  | Ksheervidaari      | Ipomoea digitata Linn.                 | Convolvulaceae     | Jvarhar   | P.N. Pip.2/45 |
| 23  | Patola             | Trichosanthes dioica Roxb.             | Cucurbitaceae      | Jvarhar   | P.N. Pip.2/54 |
| 24  | Devdaali           | Luffa echinata Roxb.                   | Cucurbitaceae      | Jvarhar   | P.N. Pip.2/60 |
| 25  | Draksha            | Vitis vinifera Linn.                   | Vitaceae           | Jvarhar   | P.N. Pip.2/64 |
| 26  | Karavellaka        | Momordica charantia Linn.              | Cucurbitaceae      | Jvarhar   | P.N. Pip.2/67 |
| 27  | Shatpushpa         | Anethum sowa Kurz.                     | Umbelliferae       | Jvarhar   | P.N. Sat.3/2  |
| 28  | Aranyajeeraka      | Centratherum anthelminticum Kuntze.    | Compositae         | Jvarhar   | P.N. Sat.3/8  |
| 29  | Dhanyaka           | Coriandrum sativum Linn.               | Umbelliferae       | Jvarhar   | P.N. Sat.3/21 |
| 30  | Methika            | Trigonella foenum-graecum Linn.        | Papilionatae       | Jvarhar   | P.N. Sat.3/22 |
| 31  | Usheer             | Vetivera zizanioides (Linn.) Nash.     | Graminae           | Jvarhar   | P.N. Sat.3/41 |
| 32  | Mushta             | Cyperus rotundus Linn.                 | Cyperaceae         | Jvarhar   | P.N. Sat.3/43 |
| 33  | Utpala             | Nelumbo nucifera Gaertn.               | Nymphaeaceae       | Jvarhar   | P.N. Sat.3/96 |
| 34  | Mugdaparni         | Phaseolus trilobus Ait.                | Papilionatae       | Jvarhar   | P.N. Sat.3/101|
| 35  | Kalamegha          | Andrographis paniculata Nees.          | Acanthaceae        | Jvarhar   | P.N. Sat.3/136|
| 36  | Sahdevi            | Vernonia cinerea Less.                 | Compositae         | Vishamjvarhar | P.N. Sat.3/137|
| 37  | Parpata            | Fumaria vaillantii Loisel.              | Fumariaceae        | Jvarhar   | P.N. Sat.3/140|
| 38  | Vasa               | Adhatoda vasica Nees.                  | Acanthaceae        | Jvarhar   | P.N. Sat.3/142|
| 39  | Tulsi              | Ocimum sanctum Linn.                   | Labiatae           | Jvarhar   | P.N. Sat.3/150|
| 40  | Katuka             | Picrorhiza kurroa Royle ex Benth.      | Scrophulariaceae   | Jvarhar   | P.N. Sat.3/158|
| 41  | Sarpagandha        | Rauwolfia serpentine Benth. Ex Kurz.   | Apocynaceae        | Jvarhar   | P.N. Sat.3/164|
| 42  | Rasna              | Pluchea lanceolata Oliver & Hiern.     | Compositae         | Jvarhar   | P.N. Sat.3/165|
| 43  | Yavasa             | Alhagi camelorum Fisch.                | Papilionatae       | Jvarhar   | P.N. Sat.3/182|
Table 3: Jvarhar drugs in Priya nighantu of mineral origin with respective references

| No. | Drug name          | Chemical name                                                                 | Action of drug | Reference          |
|-----|--------------------|--------------------------------------------------------------------------------|----------------|--------------------|
| 1   | Abraka (mica)      | Double silicate of aluminium and potassium or sodium                            | Jvarhar        | P.N. Suv.6/13      |
| 2   | Hingula (cinnabar) | Red Sulphide of Mercury [HgS]                                                  | Jvarhar        | P.N. Suv.6/24      |
| 3   | Malla (gauripasana)| White arsenic [As2O3]                                                           | Sitajvarhar    | P.N. Suv.6/27      |
|     |                    |                                                                                 |                | Jeerna, vishamjvarhar | P.N. Suv.6/31 |
| 4   | Godanti (gypsum)   | Calcium sulphate [CaSO₄.2H₂O]                                                   | Jvarhar        | P.N. Suv.6/32      |
| 5   | Dugdhapasana       | Magnesium silicate [H₂Mg₃(SO₄)₂]                                               | Pittajvarhar   | P.N. Suv.6/32      |
Table 4: Pharmacological properties of the stated Jvarhar drugs

| No. | Drug name          | Rasa          | Guna     | Virya      | Vipaka | Prabhava       | Doshakarma     |
|-----|-------------------|---------------|----------|------------|--------|----------------|----------------|
| 1   | Amalaki           | Madhura, Amla, Katu, Tikta, Kasaya | Ruksha, Guru | Shita     | Madhura | -              | Pitta shamak   |
| 2   | Agnimantha        | Tikta, Kasaya | Ruksha, Laghu | Usna     | Katu    | -              | Kapha-vata shamak |
| 3   | Prishniparni      | Madhura, Tikta | Laghu, Snigdha, Ishad | Usna | Madhura | -              | Tridosh shamak |
| 4   | Brihati           | Katu, Tikta   | Laghu, Ruksha, Tikshna | Usna | Katu    | -              | Kapha-vata shamak |
| 5   | Kantakari         | Katu, Tikta   | Laghu, Ruksha, Tikshna | Usna | Katu    | -              | Kapha-vata shamak |
| 6   | Lavanga           | Katu, Tikta   | Laghu, Snigdha | Shita | Katu    | -              | Kapha-pitta shamak |
| 7   | Nagakeshar        | Kasaya        | Laghu, Ruksha | Usna | Katu    | -              | Vatanubandhi pitta shamak |
| 8   | Karkatashringi    | Katu, Tikta   | Laghu, Ruksha | Usna | Katu    | -              | Kapha-vata nasak |
| 9   | Kataphala         | Kasaya, Tikta, Katu | Laghu, Tikshna | Usna | Katu    | -              | Kapha-vata nasak |
| 10  | Rudraksha         | Madhura       | Guru, Snigdha | Shita | Madhura | -              | Rakta-vata nasak |
| 11  | Saptaparna        | Tikta         | Laghu, Snigdha | Usna | Katu    | -              | Kapha-pitta shamak |
| 12  | Nimba             | Tikta         | Laghu     | Shita     | Katu    | -              | Kapha-vata shamak, RaktaSodhaka |
| 13  | Parjaata          | Tikta         | Laghu, Ruksha | Usna | Katu    | -              | Kapha-vatahar, Pittasodhak |
| 14  | Kantakikaranj a   | Tikta         | Laghu, Ruksha | Usna | Katu    | Visham jvarhar | Kapha-vata shamak |
| 15  | Narikela          | Madhura       | Guru, Snigdha | Shita | Madhura | -              | Vata-pitta shamak |
| 16  | Parushaka         | Madhura, Amla | Guru, Snigdha, Picchila | Shita | Madhura | -              | Vata-pitta-rakta shamak |
| 17  | Dadima            | Madhura, Kasaya | Laghu, Snigdha, Anushna | Madhura |        | -              | Tridoshagna    |
|   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|
| 18 | Ardraka | Katu | Guru, Ruksha, Tikshna | Usna | Katu | - | Kapha-vata shamak |
| 19 | Patha | Tikta | Laghu, Tikshna | Usna | Katu | - | Kapha-vata shamak |
| 20 | Rajapatha | Tikta | Laghu, Tikshna | Usna | Katu | - | Kapha-vata shamak |
| 21 | Vidaari | Madhura | Guru, Snigdha | Shita | Madhura | - | Vata-pitta shamak |
| 22 | Ksheervidaari | Madhura | Guru, Snigdha | Shita | Madhura | - | Vata-pitta shamak |
| 23 | Patola | Tikta | Laghu, Ruksha | Usna | Katu | - | Kapha-pitta shamak |
| 24 | Devdaali | Tikta | Guru, Snigdha , Tikshna | Usna | Katu | - | Pittahar |
| 25 | Draksha | Madhura | Snigdha , Guru, Mridu | Shita | Madhura | - | Vata-pitta shamak |
| 26 | Karavellaka | Tikta | Laghu, Ruksha | Ishad usna | Katu | - | Kapha-pitta-raktahar |
| 27 | Shatpushpa | Katu | Laghu, Ruksha, Tikshna | Usna | Katu | - | Pittavardhak, kapha-vata shamak |
| 28 | Aranyajeerak a | Tikta | Tikshna | Usna | Katu | - | Kapha-vata shamak |
| 29 | Dhanyaka | Kasaya, Tikta, Madhura | Laghu, Snigdha | Usna | Madhura | - | Tridosha shamak |
| 30 | Methika | Katu | Laghu, Snigdha | Usna | Katu | - | Kapha-vata shamak |
| 31 | Usheer | Tikta | Ruksha, Laghu | Shita | Katu | - | Kapha-pitta shamak |
| 32 | Mushta | Tikta, katu | Laghu, Ruksha | Shita | Katu | - | Kapha-pitta shamak |
| 33 | Utpala | Madhura | Laghu, Snigdha | Shita | Madhura | - | Vata-pitta shamak |
| 34 | Mudpapami | Madhura | Laghu, Ruksha | Shita | Madhura | - | Tridosha shamak |
| 35 | Kalmegha | Tikta | Laghu, ruksha | Usna | Katu | - | Kapha-pitta shamak |
| 36 | Sahdevi | Tikta | Laghu, Ruksha | Usna | Katu | - | Kapha-vata shamak |
| 37 | Parpata | Tikta | Laghu | Shita | Katu | - | Kapha-pitta nasak |
| 38 | Vasa | Tikta | Laghu, Ruksha | Shita | Katu | - | Kapha-pitta nasak |
| 39 | Tulsi | Katu, Laghu, Usna | Katu | Krimighna | Kapha-vata |
| No. | Name             | Quality | Characteristics | Action | Condition          |
|-----|------------------|---------|-----------------|--------|--------------------|
| 40  | Katuka           | Tikta   | Ruksha, Laghu   | Usna   | Katu               | Kapha-pitta shamak, Pittavardhak |
| 41  | Sarpaşandha      | Aliti ki | Ruksha, Laghu   | Usna   | Katu               | Nidrājānan Raktā-vatahār |
| 42  | Rasna            | Tikta   | Guru           | Usna   | Katu               | Vishagna Kaphashamak |
| 43  | Yavasa           | Tikta, Madhura | Laghu, Snigdha | Shīta  | Madhura           | Vata-pitta shamak, Kaphanisārak |
| 44  | Dhanavayasa      | Tikta, Madhura | Laghu, Snigdha | Usna   | Madhura           | Vata-pitta shamak |
| 45  | Dronapushpi      | Tikta   | Guru, Ruksha, Tikshna | Usna | Katu               | Kapha-vata shamak, Pittasodhak |
| 46  | Vatsanabh        | Madhura | Ruksha, Tikshna, Laghu, Vyavayi, Vikasi | Usna   | Madhura           | Vata-kapha nasak, Pitta sansodhak |
| 47  | Datura           | Tikta   | Laghu, Ruksha, Vyavayi, Vikasi | Usna   | Katu               | Madaka Kapha-vata shamak |
| 48  | Vansharochen     | Madhura, Kasaya | Ruksha, Laghu, Tikshna | Shīta  | Madhura           | Vata-pitta shamak |
| 49  | Sprikka          | Tikta   | - Shīta        | -      | -                 | Kapha-pitta shamak |
| 50  | Vetasa           | Kasaya, Madhura, Katu | Laghu | Shīta  | Katu               | Vedanasthapan Kapha-vata shamak |
| 51  | Trayamana        | Tikta   | Ruksha, Laghu   | Shīta  | Katu               | Kapha-pitta shamak |
| 52  | Murva            | Tikta   | Guru           | Usna   | Katu               | Tridoshahar |
| 53  | Gojihva          | Madhura, Kinchita tikta | Snigdha | Shīta  | Madhura           | Vata-pitta shamak, Kaphanisārak |
| 54  | Shaivala         | Madhura, Tikta, Kasaya | Snigdha | Shīta  | Katu               | Pittahar |
| 55  | Yuthika          | Madhura | - Shīta        | -      | -                 | Pitta shamak |
| 56  | Agastyapushpa    | Kasaya, Tikta | Ruksha, Laghu | Shīta  | Katu               | Kapha-pitta shamak |
| 57  | Shobhanjana phala | Madhura, Tikta | Laghu, Ruksha, Tikshna | Usna   | Katu               | Vata-kapha shamak |
| 58  | Karchari         | Tikta, Amla | Laghu | Usna   | -                  | Tridosha shamak |
| 59  | Shalyama         | Madhura | Laghu | Usna   | -                  | Tridosha shamak |
| No. | Name of the drug         | Reported pharmacological activity                          | References                                                                 |
|-----|--------------------------|------------------------------------------------------------|---------------------------------------------------------------------------|
| 1.  | Agnimantha              | Anti-pyretic, Anti-noci-ceptive & Anti-inflammatory activity | Narayan, N., Tiruguan, A. and Sambantham, P. 2000. Antipyretic, anti-nociceptive and anti-inflammatory activity of Premna herbaceeous roots. Fititerpia, 2(2), pp.147-153. |
|     | Premna mucronata Roxb.  |                                                             |                                                                           |
| 2.  | Prishniparni            | Anti-inflammatory activity                                 | Hem, K., Singh, N. K. and Singh, M. K. 2017. Anti-inflammatory and hepatoprotective activities of the roots of Uraria picta. International Journal of Green Pharmacy, (Suppl) 11(1), S166. |
|     | Uraria picta Desv.      |                                                             |                                                                           |
| 3.  | Brihati                 | Anti-microbial activity                                   | Srividya, A. R., Arunkumar, A., Cherian, B. and Senthoorpanadi, L. V. 2003. Pharmacognostical, phytochemical 7 antimicrobial studies of Solanum indicum leaves. Ancient science of Life, 29(1), pp.3-5. |
|     | Solanum indicum Linn.   |                                                             |                                                                           |
| 4.  | Lavanga                 | Natural antihelmintic, Anti-pyretic activity               | Amin, M., Jassal, M. M. S. and Tyagi, S. V. 2013. Phytochemical screening and isolation of Eugenol from Syzygium aromaticum by Gas Chromatography. International Journal of Research in Pharmacology and Phytochemistry, 3(1), pp.74-77. |
|     | Syzygium aromaticum Linn. |                                                          |                                                                           |
| 5.  | Nagakeshar              | Antipyretic, Analgesic, Immunomodulatory, Antimicrobial activity | Chahar, M. K. 2013. Mesua ferrea L.; A Review of the medical evidence for its Phytochemistry and Pharmacological actions. African Journal of Pharmacy and Pharmacology, 7(6), pp.211-219. |
|     | Mesua ferrea Linn.      |                                                             |                                                                           |
| 6.  | Nagakeshar              | Anti-malarial, antibacterial, anti-inflammatory, Analgesic activity | Nadpara, N. P. 2012. Phytochemistry and Pharmacological of Mesua ferrea Linn. - a review. Research Journal of Pharmacognosy and Phytochemistry, 4(6), pp.291-296. |
|     | Mesua ferrea Linn.      |                                                             |                                                                           |
| 7.  | Karkatashringi          | Anti-inflammatory activity                                 | Ismail, M. 2011. Pharmacognostic and phytochemical investigation of the stem bark of Pistacia integerrima Stew ex Brandis. Journal of Medicinal Plants Research, 5(16), pp.3891-3895. |
|     | Pistacia integerrima     |                                                             |                                                                           |
| 8.  | Kataphala               | Anti-inflammatory activity                                 | Patel, T. 2011. Mast cell stabilizing activity of bark of M. nagi. Int. J. Pharm. Stu. Res., 2, pp.1-6. |
|     | Myrica esculenta Buch-Ham. |                                                          |                                                                           |
| 9.  | Kataphala               | Antispasmodic, anti-inflammatory,                        | Panthari, P. 2012. Mnagi: A Review on active constituent biological and therapeutic effect. |
|     | Myrica esculenta         |                                                             |                                                                           |
| Buch-Ham. | Activity | Source |
|---------|----------|--------|
| 10. | Rudraksha Elaeocarpus ganitrus Roxb. | Anti-inflammatory activity | Singh, R. K. and Pandey, B. L. 1999. Anti-inflammatory activity of Elaeocarpus sphaericus fruit extracts in rats. *J. Med. Arom. Plant Sci.*, 21, pp.1030-2. |
| 11. | Rudraksha Elaeocarpus ganitrus Roxb. | Analgesic activity | Katavic P. L. 2007. Indolizidine alkaloids with delta opioid receptor binding affinity from leaves of Elaeocarpus fuscoxides. *J. Nat. Prod.*, 69, pp.1295-9. |
| 12. | Saptaparni Alstonia scholaris R.Br. | Anti-inflammatory activity | Singh, R. K. and Pandey, B. L. 1999. Anti-inflammatory activity of Elaeocarpus sphaericus fruit extracts in rats. *J. Med. Arom. Plant Sci.*, 21, pp.1030-2. |
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### 3. Discussion

Fever has been conceded as one of the hallmarks of clinical disease since ancient times. It is a physiological disorder in which the temperature is elevated above one’s normal temperature. Many proteins, breakdown products of proteins, and certain other substances, especially lipopolysaccharide toxins released from bacterial cell membranes, causes the set-point of the hypothalamic thermostat to
rise. Substances that cause this effect are called Pyrogens. Pyrogens released from degenerating body tissues cause fever during disease conditions (Gyton and Hall, 2010).

According to Acharya Charak, Jvar (fever) arises from eight causative factors - such as vata, pitta, kapha, vata-pitta, vata-kapha, pitta-kapha, vata-pitta-kapha and the eighth as Agantuka (exogenous) (Sharma, 2011). In general premonitory symptoms of fever includes fatigue, restlessness, abnormal complexion, abnormal taste, lachrymation, liking for and again aversion to cold, air, sun-heat etc., yawning, body-ache, heaviness, horripilation, anorexia, feeling of darkness, lack of cheerfulness and feeling of cold, specifically, excessive yawning, burning in eyes and dislike for food are observed in cases of vata, pitta and kapha respectively. All the symptoms are present together in fever caused by aggravation of all doshas. In that caused by combination of two doshas, symptoms of the concerned doshas are found (Sharma, 2010). The Agantuka jvar (exogenous) is the eighth type of jvar (fever) initiated with pain and caused by Abhight (injury), Abhishang (evil organisms), Abhichar (spell), and Abhishap (curse). It remains as such for a while and later on gets associated with doshas (Sastri, 2011).

The pathophysiological basis of Jvar (fever) can be studied under following pathogenesis (Samprapti chakra), along with description of the type of drug to be used on the basis of mode of action on evaluating Table 3 (Sharma, 2011).

![Pathogenesis of jvar (Samprapti chakra)](image)

Priya nighantu describes about 13 varga in total comprising of herbal, mineral, and animal origin drugs. Drugs of Priya nighantu are screened for their jvarhar action. Total 70 drugs including 3 compound preparations are found to be with jvarhar action. Obtained data is registered as per jvarhar action which belongs to different varga with corresponding references. Also the percentage tabulated represents the fraction of drugs with jvarhar action among the total drugs stated under the individual vargas (Table 1). Out of 70 drugs 19 drugs (16.52%) belong to Haritakya varga which include 2 compound formulation, 9 (23.68%) drugs from Pippaliyadi varga, 22 (19.29%) belong to Satpushpadi varga including 1 compound preparation, Sharadi varga has 8 (10.25%), Suvarnadi varga 6 (16.66%),
and Shaak varga (6.11%). Table 2 also disclose that the drugs included in Dashmoola specially Agnimanta, Prishnipami, Brihati, and Kantakari are described with jvarhar action, also Parnichatusyia is mentioned with jvar property. These drugs are also further elaborated with their jvarhar action after Priya nighantu by other Ayurvedic Samhitas. Others drugs like Lavanga, Nagakeshar, Nimba, Dadima, Patola, Dhanyakha, Kalamegha, Sarpagandha, Rasna etc. also helps in relieving from jvar. Usheer, Mushta, Parpata which is included in Sadangapaniya also exhibits jvarhar action which is also described by Acharya Charak in the Chikitsa of jvar.

Charak also discusses about Vishamjvar, also a type of fever which is characterised by “vishama arambha” (fever starting from different parts of body), “vishama kriya” (irregular nature) and “vishama kala” (irregular periodicity) (Madhavakara, 1955). It is classified into five types - Santaka, Satataka, Anyedyushka, Tritayaka and Chaturtaka jvar according to their involvement in dhatus and occurrence of fever (Sastri, 2011). Some drugs are specifically described with Vishamjvarhar action like Sahdevi, Dronapushpi, Saptaparna, and Kantakikaranja along with Godanti and Sphatika (mineral origin). Person suffering from jvar with kapha and pitta dominancy can be treated with Nimba, also Agastyapushpa can be prescribed in Chaturtaka jvar. Mineral origin drugs characterised under the Suvarnadi varga portrays jvarhar activity of Abraka, Hingula, Malla, and Dugdhapasana particularly effecting sitajvar, pittajvar, vishamjvar and jeerna types of jvar.

Table 3 emphasizes on the pharmacological properties of these jvarhar drugs mentioned in Priya nighantu helpful in understanding their mode of action.

4. Conclusion

It is a venture on the part of this review paper to culminate the documented herbs in the Priya nighantu having Jvarhar property. In this study 70 drugs with Jvarhar action are assembled in order as mentioned in the Nighantu which includes 61 herbal drugs, 3 compound preparations namely Laghu Panchamoola, Dashmoola and Parnichatusya and 6 mineral origin drugs. Also on evaluating the reported pharmacological actions of these drugs (Table 4), various research articles are studied which provides a clear evidence of their jvarhar potential. Plants have been a good source of medicine in treating various types of diseases but characterization of many plants and their active compounds has not been done yet. This study will be helpful for further studies on the clinical use of these plants and thus will be beneficial for promoting research and development in the field of medicine and opens new perspective for research and treatment of Jvar.

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