

## AMLA SKANDHA OF CHARAK SAMHITA: A CRITICAL REVIEW

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## ABSTRACT

**Introduction:** In *Ayurveda Rasa* i.e., taste of a drug plays a very important role. Total six tastes are depicted in *Ayurveda* are *Madhura* (sweet), *Amla* (Sour), *Lavana* (Salty), *Katu* (Pungent), *Tikta* (Bitter)and *Kashaya* (Astringent). The principles of pharmacology of *Ayurveda* clearly mentions that taste of drug contributes to the action of drug. The action of drug starts from mouth and amla rasa i.e., sour taste has a significant role in creating interest in food. In *Charaksamhita* the drugs are classified in six groups based on *Rasa*. *Amlaskandhas* is one group out of six.

**Material and Method:** The *dravya* enlisted in *amlaskandha* were looked for their properties and actions in Vegetable drugs in *Bruhattryai*, *Bhavprakash Nighantu*, *Nighantu Adarsh Vaidya* (2013) Then the contemporary research papers were surveyed for the pharmacological actions of *dravya*. The data compiled was critically analysed and presented in tabular form for making the skandhas more applicable practically.

**Result and Discussion:** There are total 32 *dravya* in Amla skandhas. all *dravyas* have actions like *Deepan* and *Ruchikara* i.e., they are enhancing appetite and increasing interest in food .15 *Dravya* out of 32 were found to be rich Source of Vitamin C.

**Keywords:** *Amlarasa*, *Amla Skandha*, Sour Taste, *Ruchikara*

## 1. INTRODUCTION

In *Ayurvedarasa* i.e., taste of a *dravya* plays a very important role. Total six tastes are depicted in *Ayurveda* are *Madhura* (sweet), *Amla* (Sour), *Lavana* (Salty), *Katu* (Pungent), *Tikta* (Bitter)and *Kashaya* (Astringent) Yadav (2011). The principles of pharmacology of *Ayurveda* clearly mentions that taste of drug contributes to the action of drug Yadav (2011).The action of drug starts from mouth and amla rasa i.e., sour taste has a significant role in creating interest in food. In *Charaksamhita* the *dravya* are classified in six groups based on *Rasa* Yadav (2011). *Amla skandhas* is one group out of six. Each *rasa* affects *Tridoshas*. Sour taste is known as *Amlarasa*. It is made from the elements *Prithvi* and *Agni* (Earth & Fire).

*Amlarasa* when taken in right quantity helps in the stimulation of *Agni* and enhances the appetite. *Amlarasa* is having *Snigdha* (unctuous) and *Drava* (fluid promoting) properties [Yadav \(2011\)](#). *Amlarasa* is essential for absorption of some of the micro-nutrients like Calcium. It aggravates Kapha & Pitta and alleviates Vata.

Amla Rasa is essential for absorption of some of the micro-nutrients like Calcium. The sour taste, also known as digestive fire, promotes liver function and also neutralizes the acids in the stomach.

In the present era people are fond of taking more sour and spicy food so in order to understand the effect of sour food.

Amla Rasa is found in most unripe fruits Various studies show that *Amlarasa* possesses, hypolipidemic, anti-microbial, anti-inflammatory, antioxidant, hepatoprotective and anti-emetic, Anti-cancer, activities, Cardio protective, Immunoregulation, antidepressant, anxiolytic.

## 2. MATERIALS AND METHODS

- **Study design:** Descriptive literary study.
- **Material and Method:** Ayurveda texts - Charak Samhita, Bhavprakash Nighantu [Bhavmishra \(2015\)](#), and related Published research papers from peer reviewed journal available for open access. The dravya enlisted in amla skandha were looked for their properties and actions in Vegetable drugs in Bruhatrayi, Bhavprakash Nighantu, Nighantu Adarsh [Vaidya \(2013\)](#), Then the contemporary research papers were surveyed for the pharmacological actions. The data collected was analysed and presented in systematic way.
- **Observation and Result:** The data collected is presented in [Table 1](#)

**Table 1**

S. N o.	Name of drugs	Family	Latin name	Rasa	guna	veerya	Vipaka	karma	others	Pharmacologi cal action as per recent research
1.	Aamra	Anacardiaceae	Mangifera Indica Linn.	Amla, Kashaya	Ruksha	Ushna	Amla	Ruchya	Tridoshakara	Anticancer, <a href="#">Parvez (2016)</a> Radio protective, Laxative Cardio protective, Immunoregulation:
2.	Aamrataka	Anacardiaceae	Spondias Mangifera Willd.	Amla	Guru	Ushna	Amla	Ruchikrita, Sara	Vataghna	Antibacterial, antidiarrhoeal ulcer--protective activities  Antibacterial, antidiarrhoeal ulcer-protective activities  Antibacterial, antidiarrhoeal and ulcer-

										protective activities
										Antibacterial, antidiarrhoeal and ulcer-protective activities
										Antibacterial, antidiarrhoeal and ulcer-protective activities
										Antibacterial, antidiarrhoeal and ulcer-protective activities
										Anti-bacterial, ulcer protective, Antioxidant <a href="#">Arif et al. (2015)</a>
3.	Lakucha	Moraceae	Artocarpus Lakoocha Roxb.	Madhura, Amla	Guru	Ushna	Amla	Vistambhakrita	Tridoshakriti, Shukragni Nashan, Netryoahitkara	Anti-diarrheal activity Anti-inflammatory Activity Cytotoxic Activity Antioxidant Activity <a href="#">Vanajakshi et al. (2016)</a>
4.	Karma	Apocynecae	Carrissa Carandas Linn.	Amla	Guru	Ushna	Amla	Ruchikrita, Trishaharam	Raktapittakaphapradam	Anti-Inflammatory Activity <a href="#">Tesfaye, and Ravichadran (2018)</a>
5.	Vrukshamla	Clusiacea e	Garcinia Indica Chois.	Amla	Guru	Ushna	Amla	-	Vataghna, Kaphapittalam	antioxidant, antiobesity, antiarthritic, antiinflammatory, antibacterial, hepatoprotective, cardioprotective, antidepressant, anxiolytic <a href="#">Tesfaye, and Ravichadran (2018)</a>
6.	Amlavetas	Clusiacea e	Garcinia Penunculata Roxb.	Amla	Laghu,Ruksha	Ushna	Amla	Bhedan, Deepan	Hridroga, Shula, Gulmaghna, Pittalam, Lomaharshan am,	Antioxidant, Antifungal <a href="#">Vaidya (2013)</a>
7.	Kuval	Rhamnaceae	Zizyphus Sativa	Madhur	Guru	Sheeta	Madhu	Snehan		,

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8.	Badar	Rhamnaceae	Zizyphus Jujuba	Madhur	Guru	Sheeta	Madhur	Bhedan, Brihanam Shukralam	Pittadahastra kshaytrishna Nivarana	Hepatic Protective Effect, Free Radicals Scavenging Effect, Antiulcerinic Effect Mahajan, and Chopda (2009)
9.	Dadi ma	Punicacea e	Punica granatum Linn.	Madhur,k ashayana ras	Laghu, Snigdha	Sheeta	Madhur	Shukral, Grahi, Medhabala vaham, Tarpan, deepan	Tridosaghna a, trishnahadaj waranashana m	Healing Activity, Anti-cancer Activity Arun and Singh (2012)
10 .	Matul unga	Rutaceae	Citrus medica Linn.	Amla, swadu	Laghu	Ushna	Amla		Raktapittaha ra, Trishnahara, Kanthajihvas hodhanam,S waskasaruchi hara	Hypoglycaemic and anticholinesterase activity Estrogenic activity Panara et al. (2012)
11 .	Gander	Laminacea ae	Coleus forskohlii	-	-	-	-	-	-	antidepressant, antidiuretic, antiglaucomic, antimetastatic, antispasmodic bronchodilator Patel and Saraf (2016)
12 .	Amalaki	Euphorbiaceae	Emblica officinalis Gaerth.	Amla,kashayanuras	Ruksha	Sheeta	Madhura	Vrushya, Rasayanam	Raktapittapr amehaghna,	antimicrobial, antioxidant, anti-inflammatory, analgesic, and antipyretic, adaptogenic, hepatoprotective, antitumor and antiulcerogenic activities Gaire and Subedi (2014)
13 .	Tintidi	Anacardiaceae	Rhus parviflora Roxb.	Amla	Laghu, Ruksha	Ushna	Amla	Vatashaman, kaphapittava rdhaka	Antimicrobial Activity Kumar and Badoni (2017)	
14 .	Nanditaka									
15 .	Dantashatha	Rutaceae	Feronia elephantum Correa.	Apakva - Kashaya Pakva - Amla	Laghu,	Ushna	Amla	Lekhan, Samgrahi		antioxidant and cytotoxic activities Pande et al. (2009)

16.	Arravataka									
17.	Kosha mra	Sapindaceae	Schleichera trijuga Wild.	Amla	Guru	Ushna	Amla	Deepan, grahi,ruchya,	Pittalam,kustha, shothastrpit avranakapha paha	
18.	Dhan van	Tiliaceae	Grewia tilioefolia Vahl.	Madhura, kashaya	Laghu	Ushna	Madhur	-	kaphavatagh na	antioxidant activity <a href="#">Hutke and Naswale, (2020)</a>
19.	Asha manta ka	Fabaceae	Bauhinia racemosa Linn.	kashaya	-	sheeta	katu	grahi	Shleshmapitt anut, krimikustthag udabhrinsha gandamalavr anapaha	Antifilarial <a href="#">Fatima et al. (2021)</a>
20.	Chang eri	Oxalidaceae	Oxalis corniculata Linn.	Amla	ruksha	Ushna	Amla			anxiolytic, anticonvulsant, antifungal, antiulcer, antinociceptive, anticancer, antidiabetic, hepatoprotective, hypolipedemic, abortifient, antimicrobial, wound healing properties <a href="#">Fatima et al. (2021)</a>
21.	Amali ka	Caesalpiniaceae	Tamrindus indica Linn.	Amla	Guru	Ushna	Amla	pittakaphastrakrita	Hepatoprotective Anti-emetic activity Laxative activity <a href="#">Srikanth et al [2012]</a>	
22.	Kola	Rhamnaceae	Zizyphus xylopyra Willd.	Madhur	Guru	Ushna	Madhur	Apakva – rochan, grahi Pakva - sara	analgesic, anti-inflammatory Healing of wounds <a href="#">Jena et al. (2012)</a>	
23.	Bijap ora	Rutaceae	Citrus medica Linn.	Amla, Swadu	Laghu	Ushna	Amla	Ratkapittahara	Hypoglycaemic and anticholinesterase activity <a href="#">Panara et al. (2012)</a>	
24.	Madh ukark atika (bijap urak)	Rutaceae	Citrus decumana Watt. / Citrus maxima Merrill	Swadu	Guru	Sheeta	Rochana	Raktapittaks hayaswas kasahikkabhr amapaha	antitumor activity <a href="#">Kundusen et al. (2011)</a>	

	bheda )									
25	Jambe er	Rutaceae	Citrus limon (Linn.) Burm. f.	Amla	Guru	Ushna	Amla	Vatashleshm avibadhanut	Antiproliferative Antimicrobial Activities <a href="#">Salawu et al. (2021)</a>	
26	Nimb u	Rutaceae	Citrus limon (Linn.) Burm. f.	Amla	Laghu,	Ushna	Amla	Dipana, Pachana	Antiproliferative Antimicrobial Activities <a href="#">Salawu et al. (2021)</a>	
27	Mista nimbu	Rutaceae	Citrus limettioides Tanaka	Swadu	Guru	-	-	Balya, Brimhan	Galarogavish avidhvanshik aphotkleshi	anticancer, antimicrobial <a href="#">Gualdani et al. (2016)</a>
28	Karm arang a	Oxalidace ae	Averrhoa carambola Linn.	Swadu, amla	-	sheeta	-	Grahi	Rujakara	Anti- Hyperglycemic Activity <a href="#">Fei et al. (2021)</a>
29	Naran ga	Rutaceae	Citrus reticulata Blanco	Madhur,A mla	sara	ushna	-	Rochana, Durjara	Vatahata	Antioxidant Capacity, Anticancer Ability <a href="#">Wang et al. (2017)</a>
30	Laval phala	Euphorbi aceae	Cicca acida Merrill	Swadu, Amla, Tuvar	Guru, Ruksha, Vishada	-	-	Rochana	Ashmar, Arsha, kaphapittaha ra	Anticystic fibrosis activity Anticancer activity antimicrobial activity <a href="#">Taraifdar et al. (2016)</a>
31	Chuk rika	Polygona ceae	Rumex vesicarius	Amla, Swadu	Laghu	Ushna	Amla	Rochan	Kaphapittakr ita	Wound healing activity Anthelmintic activity
32	Lonee	portulaca ceae	Portulaca quadrifida Linn.	Amla, Patu	Ruksha, Guru, Sara	Ushna	-	Vakadoshanu t,Lsochanrog a	Anticonvulsant, Antifungal activity <a href="#">Das (2013)</a>	

**Table 2**

No.	Rasa	No. of drugs	%
1.	<i>Amla</i>	12	37.5
2.	<i>Madhura</i>	05	15.62
3.	<i>Madhur amla</i>	07	21.87
4.	<i>Amla kashay</i>	03	9.37
5.	<i>Madhura Kashaya</i>	02	6.25
6.	<i>Amla lavana</i>	01	3.125

### 3. DISCUSSION

There is total 32 dravya in *Amla skandhas*, 23 dravyas have Amla rasaOut of them, 9 dravyas have *Swadu rasa* & *amla rasa*. 23 Dravyas have *Guru guna* and 9 dravyas have *Laghu guna*, 25 dravyas have *Ushna veerya* and 7 dravyas have *sheat veeryas*. 26dravyas have Amla veepaka and 6 dravys have *Madhura veepaka*. all dravyas have action like Deepan and *Ruchikara*. 15 Dravya are rich Source of Vitamin C.

### 4. CONCLUSION

*Amlaskandha* of *Charaksamhita* can be very useful for maintenance of health and management of many disorders of GI tract.

### CONFLICT OF INTERESTS

None.

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### REFERENCES

- Arif, M., Rahman, M.A., Imran, M., and Khalid, M. (2015). An Insight of Spondias Mangifera Willd : An Underutilized Medicinal Plant with Immense Nutraceutical and Therapeutic Potentials. International Journal of Research in Pharmaceutical Sciences, 6(2), 17-26.
- Arun, N., and Singh, D. P. (2012). Punica Granatum : A Review on Pharmacological and Therapeutic Properties. Journal of Pharmaceutical Sciences and Research 3(5), 1240-1245.
- Bhavmishra (2015). Bhavaprakasha Nighantu, Commentary by Padmashri prof. K. C. Chunekar, Edited by Late. Dr. G. S. Pandey, Chaukhambha Bharati Academy, Varanasi, Reprint Edition.
- Das, M., & D., A. K. (2013). Phyto-pharmacological review of Portulaca quadrifida Linn. Journal of Applied Pharmaceutical Research, 1(1), 01-04.
- Fatima, M., Ahmed, S., Siddiqui, M. U. A., and Hasan, M. M. U. (2021). Medicinal Uses, Phytochemistry and Pharmacology of Bauhinia Racemosa Lam. Journal of Pharmacognosy and Phytochemistry, 10(2), 121-124. <https://doi.org/10.22271/phyto.2021.v10.i2b.13972>.
- Fei, L., Lixia, P., Ziqin, L., Xiyu, J., Junbo, Z., Yan, Y., Xirui, H., Nan, Z. (2021). Traditional Uses, Phytochemical Constituents and Pharmacological Properties of Averrhoa Carambola L. : A Review. Frontiers in Pharmacology, 12. <https://doi.org/10.3389/fphar.2021.699899>.
- Gaire, B.P., Subedi, L. (2014). Phytochemistry, Pharmacology and Medicinal Properties of Phyllanthus Emblica Linn. Chinese Journal of Integrative Medicine. <https://doi.org/10.1007/s11655-014-1984-2>.
- Gualdani, R., Cavalluzzi, M. M., Lentini, G., & Habtemariam, S. (2016). The Chemistry and Pharmacology of Citrus Limonoids. Molecules (Basel, Switzerland), 21(11), 1530. <https://doi.org/10.3390/molecules21111530>.
- Hutke, V. D., and Naswale, M. P. (2020). Evaluation of in Vitro Antioxidant Activity of Different Solvent Extracts from Grewia Hirsuta (Vahl). International Journal

- of Advanced Research in Biological Sciences, 7(10), 110-115.  
<http://dx.doi.org/10.22192/ijarbs.2020.07.10.010>.
- Jena, B., Ratha, B., & Kar, S. (2012). Wound Healing Potential of *Ziziphus Xylopyrus* Willd. (Rhamnaceae) Stem Bark Ethanol Extract Using in Vitro and in Vivo Model. Journal of Drug Delivery and Therapeutics, 2(6).  
<https://doi.org/10.22270/jddt.v2i6.316>.
- Kumar, G., and Badoni, P. P. (2017). Antimicrobial Activity of *Rhus parviflora* Roxb. : Leaves Extract Mediated Synthesized ZnO Nanoparticles. International Journal of ChemTech Research, 10(7), 377-381.
- Kundusen, S., Gupta, M., Mazumder, U. K., Haldar, P. K., Saha, P., & Bala, A. (2011). Antitumor Activity of *Citrus maxima* (Burm.) Merr. Leaves in Ehrlich's Ascites Carcinoma Cell-Treated Mice. ISRN pharmacology, 2011, 138737.  
<https://doi.org/10.5402/2011/138737>.
- Mahajan, R. T., and Chopda, M. Z. (2009). Phyto-Pharmacology of *Ziziphus jujuba* Mill- A Plant Review. Pharmacognosy Reviews, 3(6), 320-329.
- Panara, K., Joshi, K., and Nishteswar, K. (2012). A Review on Phytochemical and Pharmacological Properties of *Citrus Medica* Linn.
- Pande, C., Tewari, G., Singh, C., Singh, S., Padalia, R. C. (2009). Chemical Composition of the Essential Oil of *Feronia Elephantum* Correa. Natural Product Research, 24, 1807-1810. <https://doi.org/10.1080/14786411003752078>.
- Parvez, G. M. M. (2016). Pharmacological Activities of Mango (*Mangifera Indica*) : A Review GM Masud Parvez, Journal of Pharmacognosy, 5(3), 01-07.
- Patel, T., and Saraf, M. (2016). A Review on the Pharmacology of Coleus *Forskohlii* Briq : A Threatened Medicinal Plant.
- Salawu, K.M., Oyerinde, A.A., and Bello, R. H. (2021). Antiproliferative and Antimicrobial Activities of *Citrus limon* (L.) Burm. f. Stem Bark Extract. Nigerian Journal of Basic and Applied Science, 29(1), 49-54.
- Sarma, R., Das, M., Mudoi, T., Sharma, K. K. Kotoky, J., Devi, R. (2016). Evaluation of Antioxidant and Antifungal Activities of Polyphenol-rich Extracts of Dried Pulp of *Garcinia pedunculata* Roxb. And *Garcinia morella* Gaertn. (Clusiaceae). Tropical Journal of Pharmaceutical Research, 15(1), 133-140.  
<https://doi.org/10.4314/tjpr.v15i1.19>.
- Srikanth M., Swetha, T., and Veeresh, B. (2012). Phytochemistry and Pharmacology of *Oxalis Corniculata* Linn. : A Review. International Journal of Pharmaceutical Sciences and Research. [http://dx.doi.org/10.13040/IJPSR.0975-8232.3\(11\).4077-85](http://dx.doi.org/10.13040/IJPSR.0975-8232.3(11).4077-85).
- Tarafdar, R. G., Nath, S., Talukdar, A. D., Choudhury, M. D. (2016). *Cicca Acida* L. : Phytochemistry and Pharmacological Studies. Wiley Online Library, 68(2), 148-158. <https://doi.org/10.1111/jphp.12514>.
- Tesfaye, T., and Ravichadran, Y. D. (2018). Traditional Uses, Pharmacological Action and Phytochemical Analysis of *Carissa carandas* Linn. : A Review. Natural Products Chemistry & Research Biology, 6(5). <https://doi:10.4172/2329-6836.1000334>.
- Vaidya, V. B. (2013). *Nighantu Adarsha* (Vol-1). Chaukhamba Bharati Academy, Varanasi.
- Vanajakshi, M., Virupaksha, J. H., and Maria, S. (2016). A Review on Pharmacological Actions of *Artocarpus lacoocha* Roxb. Research Journal of Pharmacology and Pharmacodynamics, 8(4), 181-184. <https://doi:10.5958/2321-5836.2016.00033.1>.
- Wang, Y., Qian, J., Cao, J., Wang, D., Liu, C., Yang, R., Li, X., & Sun, C. (2017). Antioxidant Capacity, Anticancer Ability and Flavonoids Composition of 35 Citrus (*Citrus*

- reticulata Blanco) Varieties. Molecules (Basel, Switzerland), 22(7), 1114.  
<https://doi.org/10.3390/molecules22071114>.
- Yadav, T. (2011). Charaka samhita of Agnivesha, Sutrasthana Atreybhadrakapiya Adhyay 26/43 2 Edition by Reprint, Chaukhamba surabharati prakashana, Varanasi.
- Yadav, T. (2011). Charaka samhita of Agnivesha, Sutrasthana Dirghamjivantiyam Adhyay 1 /66 Edition by Reprint, Chaukhamba surabharati prakashana, Varanasi.
- Yadav, T. (2011). Charaka samhita of Agnivesha, Sutrasthana Indriyopkramaniya Adhyay 8/138 Edition by Reprint, Chaukhamba surabharati prakashana, Varanasi.
- Yadav, T. (2011). Charaka samhita of Agnivesha, Sutrasthana Yajjapurishiya Adhyay 26 /72 Edition by Reprint, Chaukhamba surabharati prakashana, Varanasi.