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Antimicrobial Potential of Polyherbal Formulation Vidangadi Churna - A Review

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ABSTRACT

Herbal medicines are the major remedy in traditional medical systems from thousands of years and made a great contribution in maintaining human health and in preventing many infectious diseases. Ayurvedic herbal preparations based on the medicinal plants are used in modern health care to prevent common microbial diseases but their antimicrobial potential was not evaluated in detail. Therefore antimicrobial potential of polyherbal formulation vidangadi churna mention in the text is taken for review. The authentic subject material has been reviewed from Ayurveda and modern medical literature. Different research and review article were searched in different journals to establish the antimicrobial potential of vidangadi churna

Keywords: vidangadi, antimicrobial, antibacterial, churna

INTRODUCTION

The micro-organisms induced diseases are responsible for over 50% deaths and are still a key concern to public health especially in developing countries¹. Synthetic antimicrobial drugs are expensive and relatively unavailable in developing and under-developed countries². Again, the safety aspect of synthetic drugs is a major concern since they may be responsible for causing cancers and other lethal diseases when used for a long time. This is attributed to the presence of many carcinogenic and teratogenic agents³. Emergence of anti-microbial resistance in pathogenic bacteria against antimicrobial drugs is another concern^{4, 5}. Medicinal plants are considered valuable sources

are called nature's 'chemical factories' for providing secondary metabolites that contain antimicrobial properties^{6, 7, 8, and 9}. Plant-based drugs are considered safe for health. Moreover, compounds derived from plants are found more active when compared to well established antibiotics.¹⁰ Therefore antimicrobial potential of polyherbal formulation vidangadi churna mention in the text is taken for review.¹¹

Method of preparation vidangadi churna¹²

Following ingredients are used for the preparation of vidangadi *churna*

S.No	Ingredients	Latin name	Family	Part used	Quantity
1	Vidanga	Embelia ribes Burn	Myrsinaceae	Fruit	1 part
2	Saindhava lavana	Rock salt			1 part
3	Yavakshara	Alkali of yava			1 part
4	Kampillaka	Mallatus philippinensis	Euphorbiaceae	Hairs in the fruit	1 part
5	Haritaki	Terminalia chebula	Combretaceae	Fruit.pulp	1 part

The fine powder of all the ingredients are prepared separately and mixed together in the prescribed quantity.

Ingredients of vidangadi churna and their pharmacological and therapeutic properties.

S.No	Name of the drug	Rasadi panchak & ayurvedic properties	Pharmacological properties
1	Vidanga	Rasa - Katu, Kashaya.	Anthelmintic ¹⁴ ,
		Guna - Laghu, Ruksha, Teekshna.	Antibacterial 15,16
		Virya - Ushna, , Vipak - Katu,	Antifungal 17

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		Prabhava - Krimighna.Kaphavatashamaka.	
		Dogaghnata - Shiroroga, apasmara, Agnimandya, Ajeerna, Krimidanta, Chhardi,	
		darshool, Adhmana, Vibandha, arsha, Krimiroga, Jeerna	
		pratishyay,Gandamala,mutrakruchchha.	
		Karma - Krimighna, kushthaghna, Shirovirechana, Nadibalya, Deepana, Pachana,	
		Anulomana, Garbh Nirodhaka, varnya, Rasayana ¹³	
2.	Saindhava lavana	Guna – laghu,snigdha,tikshna	Antimicrobial ¹⁹
		Veerya- sheeta	
		Doshaghanta- tridoshakarma	
		Karma	
		agnideepana,pachana,ruchya,netriya,hridya,vrishya,shothahara,vibandagna,vranadoshar	
		a,chakshuya,Hrudya ¹⁸	
3	Yavakshara	Karma Tridoshaghana,saumyata,dahana,	Antibacterial ²¹
		pachana,darana,katu,tikshna,	
		vilayana,shodhana,ropana,	
		shoshana,lekhana,krimighana ²⁰	
4	Kampillaka	Rasa- katu	Antimicrobial ^{23,}
		Veerya- ushna	Antifilarial ²⁴
		Doshaghanta- kapha hara	Antibacterial ²⁵
		Karma – krimi,gulma,udarroga, vrana,prameha	Antiparasitic ²⁶
		Anaha,visha and rechaka ²²	
5.	Haritaki	Rasa - Kashaya, Tikta, Madhura,	Antibacterial ^{28,29,30,31,32,33,34}
		Katu, Amla.	
		Guna - Laghu, Ruksha,	
		Virya - Ushna, ,Vipaka - Madhura,	
		Prabhava- Tridoshshamak,	
		Roshaghnata -Tridoshashamaka	
		specially Vatashamaka,	
		Dogaghnata - Vatavyadhi, shotha - Vednayuktavikara, netrabhishyanda, Agnimandya,	
		shoola, Anaha, Gulma,	
		vibandha, Udararoga, Arsha, kamala, Yakritpleehavriddhi,krimiroga, Kushtha,	
		KKarma - Deepan, Pachana, Yakriduttejaka, Hridya Shothahara, Vednasthapana, ,	
		kaphaghna, Srotaha - Shodhana, prajasthapan,garbhashayashothahara,	
		Rasayana. ²⁷	

CONCLUSION

This review has presented a collective knowledge on therapeutic ,Pharmacological activities of *vidangadichurna*as,antibacterial,antihelmenthic,an tifilarial,antiparasitic, antimicrobial .So this review will also facilitate to gain all about the past scientific research and the necessary information about the enormous pharmacological acitivites of this formulation which helps the researcher to explore this formulations for the promotion of health.

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