Literary review of *Yava* (Barley)

Dr. Shirke UJ,¹ Dr. Yadav Jyotsna,² Dr. Shirke JM,³ Dr. Udmale MM.⁴

¹Associate Professor, ²Assistant Professor, Dept. of Swasthavritta, ³Professor, ⁴Assistant Professor, Dept. of Roga Nidana, Dr. D. Y. Patil College of Ayurved & Research Center, Pimpri, Pune, Maharashtra, INDIA.

**ABSTRACT**

According to *Upanishads*, food is *Brahman*, the Divine reality. The physical body itself is born of and lives by food. Right diet is the essence of disease prevention and the foundation of a healthy and happy life. A properly selected diet and diet plan plays a critical importance in the management of any disease. Only a well-balanced diet can cure numerous diseases, sometimes even good medicines are unable to cure certain diseases without balanced diet, that’s why food is said to be most important medicine. Today there is increasing public awareness of the importance of diet for the maintenance and promotion of health. An Ayurvedic text entails the uses of *Yava* in religious ceremony, dietary and medicinal preparations. *Yava* is used for *Lekhana Karma*. The present paper deals with literary review of *Yava*.

**Key words:** *Yava, Barley.*

**INTRODUCTION**

*Yava* is famous *Shukadhanya* used in Indian systems of medicines viz. Ayurveda and used in different medicinal preparations as well as in dietary form for many *Santarpanajanya Roga* like *Prameha*, *Kushtha* and *Medoroga* etc. for *Lekhana Karma*.

*Yava* is a cereal using since ancient period. It not only provides nutrition, but also having many medicinal properties too. Barley is one of the oldest grain crops. It is cultivated extensively in all countries of the world. It is consumed as a staple food by small groups of the population in some countries. The greatest use of barley, however, is for the preparation of malt, which is used for brewing and in the preparation of malt extract for incorporation in infant and invalid foods.

There is detailed description of *Yava* in *Veda, Aranyak, Upanishada, Grihya Sutra, Shatpath Brahman* and also in various *Ayurvedic Samhitas* and *Nighantus*.

This paper reviews the Botanical names, Varnacular names, *Ayurvedic pharmacodynamics, Nutritional evaluation, Chemical composition, Traditional medicinal uses in different countries and various pathya Kalpanas* of *Yava*.

**MATERIAL**

**Botanical name - Hordeum vulgare**

**Vernacular names**

- English name - Barley
- Bengali name - Job
- Gujarati, Hindi, Marathi name - Jau
- Kannada name - Jave godhi
- Kashmiri name - Jave godhi
- Malyalam name - Yavam
- Oriya name - Jaba dhana
- Tamil name - Barli arisi

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- Telugu Name - Barli biyyam
- Sanskrit name - Yava\(^1\)

**Ayurvedic Pharmacodynamics**

**Rukshaha Sheeto Guruhu Swaduhu Bahuva Tashrut Yavaha !**

**Sthairyakrut Sakashayashcha Balyaha Shleshma virunat !!**\(^2\) Ch.Su.27/18

**Rukshaha Sheeto Guruhu Swaduhu Saro Vidvatakrut Yavaha !**

**Vrishyaha Sthairyakaro Mutramedahta Pittakaphan Jayet !!**

**Pinas Swas Kasa Urusthmabha Kanth Twak Amayaman !**

**Guna Nyuntara Dneya Yavat Anuyavat Vayaha !**

**Ushnaha Sara Venuyvahaka Kashaya Vatapittalaha !**\(^3\)

**Guna of Yava**

1. **Rasa** - Madhura, Tikta, Kashaya
2. **Guna** - Ruksha, Pichhala, Mridu, Anabhishyandi, Sara
3. **Virya** - Sheeta
4. **Vipaka** - Katu
5. **Doshaghnata** - Kaphapittahara, Mutra Doshahara

**Nutritional evaluation of Yava**

Raw barley Nutritional value per 100 gm

- Energy - 335kcal
- Carbohydrates - 69.4 cal.
- Sugars - 0.8 gm
- Dietary fiber - 3.9 gm
- Fat - 1.3 gm
- Protein - 11.5gm

- Thiamine (vitamin B1) - 0.20 mg
- Riboflavin (vitamin B2) - 0.20mg
- Niacin (vitamin B3) - 4.7mg
- Vitamin B6 - 0.3 mg (23%)  
- Calcium - 0.03 mg
- Iron - 3.7mg
- Phosphorus - 0.23 mg
- Carotene - 10mg
- Moisture - 12.5 gm\(^4\)

**Chemical composition**

**Seeds**

Cyanogenic glycoside characterized as 2-β-D-glucopyranosylmethyl - (2R) - butyronitrile, ubiquinones, proanthocyanidins, glycosides of hordatines A & B, procyanidin B3, trimer of procyanidin C2, prodelphinidin, chrysoeriol, hordeumimin, pangamic acid, protein, carbohydrates, calcium, phosphorus, iron.

**Leaves**

Arabinogalacto (4 - O - methyglucuron) - xylan, cyanogenic glucoside, 6'' - sinapolsaponarin, 6''-ferulylsaponarin and 4’ - glucosyl - 6'' - sinapolysonarin, 2''-O - glycosylisovitexin.

**Whole plant**

P - coumaroylagmatine, hordenine and its derivative, pyrrolidine, luteolin glycoside, flavones glycosides - orientoside and orientin, cynogluicosides-3- beta - D - glucopyranosyloxy- 2 - methylpropene, 4 - beta - D - glucopyranosyloxy - 3 - hydroxyl - 3- hydroxymethy - butyrobitrile.\(^5\),\(^6\)

**Traditional medicinal uses in different countries**

**Afghanistan:** Flowers are taken orally by females for Contraception.\(^7\)

**Argentina:** Decoction of the dried fruit is taken orally for Diarrhoea and to treat respiratory and urinary tract infections.\(^8\)
China: Decoction of the dried fruit is taken orally for diabetes. [9]

Egypt: The fruit is used intra vaginally as a contraceptive before and after coitus. 53% of 1200 puerperal women interviewed practiced this method, of whom 47% depended on Indigenous method and/or prolonged lactation. [10]

Iran: Flour is used as a food. A decoction of the dried seed is used externally as an emollient and applied on hemorrhoids and infected ulcers. A decoction of the dried seed is taken orally as a diuretic and antipyretic and used for hepatitis, diarrhea nephritis, bladder inflammation, gout.

Decoction of the dried seed is applied to the nose to reduce inter nasal inflammation. [11]

Italy: Compresses of boiled seeds are used to soothe rheumatic and joint pains. [12]

Korea: Hot water extract of the dried entire plant is taken orally for beriberi, coughs, influenza, measles, syphilis, nephritis, Jaundice, dysentery, and ancylostomasis; for thrush in infants; and as a diuretic. Extract of the dried entire plant is used externally for prickly heat. [13]

United States: Infusion of the dried seed is taken orally for dysentery, diarrhea, colic, digestive and gastrointestinal disorders. [14]

Various Pathya Kalpana of Yava

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Kultthadi Yush

Badar, Kulith, Dhanyak, Panchmul Yava.

Vatjanya Chardi

Mashadi Khal

Mash, Yava, Badar, Curd, Dadim Swarasa, Tail, Ghee

Atisara Su.Ut.40/136

Yava Tarpan

Yava, Vartul, Mudga, Draksha, Dadima, Karjura

Madatayaya Chakradatta

Narikela di Yog

Narikel Jala, Yava, Sharkara.

Trushna, Murcha, Bhrama

Ni.Ra. Part 2 (Murchya)

CONCLUSION

It is a time to reintroduce the barley again in main diet due to its Ayurvedic pharmacodynamics to prevent and cure many diseases. Also it has high nutritional value; it can be good substitute of carbohydrate, protein, fibre and minerals in diet. This cereal can play important role in diet as well as it is indicated as Pathya in many diseases.

REFERENCES

2. Prof. Ravidatta Tripathi, Ashang Hridaya ,Chaukhamba Sanskrit Pratishthan, Varanasi, Page No.120
5. Dhiman Anil Kumar, Ayurvedic Drug Plants, Daya Publishing House, Delhi, 2006,171.

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