

Research and Reviews; Journal of Pharmaceutics and Nanotechnology

Wheatgrass (*Triticum aestivum*); A Super Herb

Nitin Panwar*

Department of Biotechnology, Graphic Era University, Dehradun, Uttarakhand, India

Commentary

Received; 02/02/ 2015

Revised; 02/03/ 2015

Accepted; 10/02/ 2015

*For Correspondence

Nitin Panwar, Department of Biotechnology, Graphic Era University, Dehradun, Uttarakhand, India, Tel; +91 9701014770; E-mail; nitz.panwar@yahoo.com.

Keywords; Antioxidants; Phytochemical; Medicinal plant

ABSTRACT

Herbs have intense components and ought to be treated with the same care and regard as pharmaceutical medications. Natural prescription is the utilization of plants (herbs) to treat illness and improve health. Home grown solution is utilized to treat a scope of clutters including tension, joint pain, despondency, hypertension, a sleeping disorder, hormonal irregular characteristics, headaches, skin issues, for example, dermatitis and different issue. Herbs have been the source of proficient medicines since ancient times. They are the foundation of modern medicines and are used for treatment and cure of various diseases and skin problems. Ancient doctors methodically collected information about herbs and developed well-defined pharmacopoeias to treat a variety of disorders. More than a section of all drugs used today contain active ingredients derived from those same ancient plants. Many herbal plants have shown the potential to cure most dreaded diseases like cancer and are under research for more applications.

INTRODUCTION

Wheatgrass is a young grass obtained from sprouting wheat seeds. It belongs to the family Poaceace which includes a variety of wheat-like grasses. *Triticum aestivum* and is mentioned in Ayurveda as a herbal system of medicine and described as immune-modulator, antioxidant, astringent, laxative, diuretic, antibacterial and used in the acidity, colitis, kidney malfunction, swelling wounds and vitiated conditions of Kapha and Pitta. Wheatgrass is believed to be having property of optimizing blood sugar level. Now a days, its use as an anti-diabetic agent is being popularized. Wheatgrass provides a concentrated amount of nutrients, including iron; calcium; magnesium; amino acids; chlorophyll; and vitamins A, C and E.

Wheat grass can be followed back in history more than 5000 years, to antiquated Egypt and maybe even early Mesopotamian civilizations. It is indicated that old Egyptians discovered holy the youthful verdant razor sharp edges of wheat and prized them for their constructive outcome on their wellbeing and imperativeness. The consumption of wheatgrass in the Western world started in the 1930s as a consequence of tests led by Charles F. Schnabel in his endeavours to promote the plant. By 1940, jars of Schnabel's powdered grass were at a bargain in significant medication stores all through the United States and Canada. The wheatgrass that is ensured natural delivers high amassings of chlorophyll, catalysts and vitamins. The wheatgrass seed starts its trip engrossing regular supplements from dirt arranged utilizing natural systems containing NO hereditarily built items, in readiness to turn into a tall, productive plant. At this stage, the plant has the supplement profile like that of other verdant green vegetables and will keep on growing until these supplements achieve their crest levels, at around three inches long. Natural wheatgrass contains vitamins A, B complex, C and E, follow components calcium, iron, magnesium and potassium, catalysts and amino acids. As a cancer prevention agent, natural wheat grass can support the safe framework and search free radicals. Natural wheatgrass has been demonstrated to be a capable body detoxifier. Its high chlorophyll substance purifies the liver, tissues and cells and purges the blood. Natural wheatgrass likewise contains folic corrosive, iron, and vitamin B-12 which are needed for legitimate red platelet creation. Natural wheatgrass, rich in chlorophyll, catalysts, vitamins and supplements has been connected to enhanced wellbeing. A portion of the advantages of wheatgrass include; Increment of hemoglobin generation,

Revamping of the circulatory system, Purging the blood, Enhancing the body's capacity to recuperate wounds, Killing poisons and cancer-causing agents in the body, Serving to purge the liver, Enhancing absorption, Expelling substantial metals from the body [1 - 11].

Advantages of wheatgrass

A percentage of the prevalent characteristics of wheatgrass and the juice that can be removed from its sharpened pieces of steels incorporate the accompanying;

- Increases red platelet check and brings down circulatory strain.
- Wheat grass juice contains cell reinforcements; one of the imperative elements of cancer prevention agents in the body is to avoid DNA harm that happens when typical oxidation procedures escape from control.
- Stimulates the thyroid organ, adjusting heftiness, heartburn, and a large group of different grumblings.
- Restores alkalinity to the blood. The juice's wealth of soluble minerals aides diminishes over-corrosiveness in the blood. It can be utilized to ease numerous inward torments, and has been utilized effectively to treat peptic ulcers, ulcerative colitis, obstruction, the runs, and different dissensions of the gastrointestinal tract [12 - 15].
- Is an intense detoxifier, and liver and blood defender. The proteins and amino acids found in wheatgrass can shield us from cancer-causing agents like no other sustenance or pharmaceutical. It reinforces our phones, detoxifies the liver and circulation system, and artificially kills ecological contaminations [16].
- Fights tumors and kills poisons. Late studies demonstrate that wheatgrass juice has an intense capacity to battle tumors without the typical harmfulness of medications that additionally hinder cell-devastating operators. The numerous dynamic mixes found in grass juice purge the blood and kill and review poisons in our cells [17, 18].
- Offers the advantages of a fluid oxygen transfusion since the juice contains fluid oxygen [19 - 32].

CONCLUSION AND FUTURE PROSPECTS

Natural medicine can be extremely valuable for treating various sicknesses from minor scratches and blazes to genuine infections. Home grown drugs are basically utilized for industrious diseases, for example, headaches, joint swelling, pessimism and PMS. Herbal cures are anything but difficult to take, and numerous herbs can be developed at home, so they are frequently more helpful for minor conditions. Wheatgrass is easily available source of various nutrients. Researchers have known for quite some time that extracts of wheat sprouts contain very high levels of natural antioxidants, but the scientific characterization of these antioxidants has taken some time. Plant item for consumption currently under pharmacological investigation is wheatgrass juice; a dietary supplement derived from *Triticum aestivum* L. There is both subjective and technical evidence to suggest that the medicinal efficacy of this plant may be due to its high chlorophyll concentrations. Plant products are of increasing interest in the search for new drugs and medicines in the treatment of disease. There is a vast scope of research and innovations for wheatgrass (*Triticum aestivum*). It is one of the promising herbs which can surprise the researcher every time you work on it.

REFERENCES

1. Siddiqui BS, Sattar FA, Begum S, Dar A, Nadeem M, et al. A Note on Anti-leishmanial, Spasmolytic and Spasmogenic, Antioxidant and Antimicrobial Activities of Fruits, Leaves and Stem of *Morinda citrifolia* Linn – an Important Medicinal and Food Supplement Plant. *Med Aromat Plants*. 2014;3:159.
2. Guerrini A, Sacchetti G. Chemical Fingerprinting of Medicinal and Aromatic Plant Extracts-HP-TLC Bioautographic Assays as Preliminary Research Tool to Match Chemical and Biological Properties. *Med Aromat Plants*. 2014; 3:e152.
3. Yadav RK, Prakash A. Aromatic Medicinal Plant Resources in Uttar Pradesh, India. *Med Aromat Plants*. 2014; 3:160.

4. Prasanth Reddy V, Ravi Vital K, Varsha PV, Satyam S. Review on *Thymus vulgaris* Traditional Uses and Pharmacological Properties. *Med Aromat Plants*. 2014; 3:164.
5. Eleazu CO, Kolawole S, Awa E. Phytochemical Composition and Antifungal Actions of Aqueous and Ethanolic Extracts of the Peels of two Yam Varieties. *Med Aromat Plants*. 2013; 2:128
6. Chatterjee S, Chatterjee S, Dey KK, Dutta S. Study of Antioxidant Activity and Immune Stimulating Potency of the Ethnomedicinal Plant, *Cassia alata* L. Roxb.. *Med Aromat Plants*. 2013; 2:131.
7. Mostafa NM, El-Dahshan O, Singab ANB. *Pyrostegia venusta* Ker Gawl. Miers-A Botanical, Pharmacological and Phytochemical Review. *Med Aromat Plants*. 2013; 2:123.
8. Boligon AA, Feltrin AC, Gindri AL, Athayde ML. Essential Oil Composition, Antioxidant and Antimicrobial Activities of *Guazuma Ulmifolia* from Brazil. *Med Aromat Plants*. 2013;2:126
9. Mamedov N. Medicinal Plants Studies-History, Challenges and Prospective. *Med Aromat Plants*. 2012; 1-e133.
10. Chanotiya CS, Singh SC. Low Molecular Weight Volatiles in Western Himalayan *Artemisia*. *Med Aromat Plants*. 2012;1:e141.
11. Fang EF, Knudsen MS, Bohr VA, Bun NG. The Anti-Aging Efficacy of Natural Compounds. *Med Aromat Plants*. 2012;1:e125
12. Zhan Y, Chen G, Chen Y, Zhao Y. Clinical Application of SIRT1 for Diabetes Therapy. *J Pharmacogenom Pharmacoproteomics*. 2012;e121.
13. Faghri PD, Momeni K. Musculoskeletal Diseases, Overweight and Obesity, and Aging Workforce-How to Encounter the Problem. *J Obes Wt Loss Ther*. 2012;e001.
14. Nakao YM, Kawakami K. Abdominal Obesity-Why it Matters. *J Obes Weight Loss Ther*. 2012; 4:e111.
15. Thebo N, Sheikh W, Bhangar MI, Iqbal P, Nizamani MH. Therapeutic and Antioxidant Potential in the Shell Extract of *Prunus amygdalus* against Dermal Mycosis. *Med Aromat Plants*. 2012;1:108.
16. Thomas JE. Uncovering the Chemical Benefits of Medicinal Plants and Functional Foods Presents New Challenges and Untold Opportunities. *Med Aromat Plants*. 2012;1:e116.
17. Hosni K 2012 Medicinal and Aromatic Plants in Developing Countries. *Med Aromat Plants*
18. Bourgou S. Aromatic and Medicinal Plants-Why so Interesting Today? *Med Aromat Plants*. 2012;1:e102.
19. Gaweesh A, Sengab AENB, El-Hefnawy HM, Osman SM, Abdou AM. Phytoconstituents, Cytotoxic, Antioxidant and Hepatoprotective Activities of the Aerial Parts of *Lycium shawii* R. Growing in Egypt. *Med Aromat Plants*. 2012;4:180.
20. Sukumaran S, Joselin J, Geetha VS, Jeeva S. Phytochemical and antimicrobial study of the flowers of *Arenga wightii* Griff. - An endemic palm of Southern Western Ghats. *Med Aromat Plants*. 2015;4:181.
21. Eddouks M, Hebi M, Zeggwagh N, El Bouhali B, Hajji LH. Effect of *Momordica charantia*, *Camellia sinensis* and Cinnamon Species on Insulin Resistance. *Med Aromat Plants*. 2015;4:182.
22. Kamal R, Katariya PK, Mathur M, Yadav S. In Vitro Regulation of Non-enzymatic Antioxidant Efficiency of *Momordica dioica* Roxb by Elicitation and Salt Stress. *Med Aromat Plants*. 2015;4:179.
23. Sukumaran S, Joselin J, Geetha VS, Jeeva S. Phytochemical and antimicrobial study of the flowers of *Arenga wightii* Griff. - an endemic palm of Southern Western Ghats. *Med Aromat Plants*. 2015;4:181.
24. Guo L, Zhao C, Liu C, Wang R. The Role of Traditional Chinese Medicine in Anticancer Therapy. *Med Aromat Plants*. 2012;3:e156.
25. Butnariu M. Action and Protection Mechanisms of Free Radicals. *J Pharmacogenom Pharmacoproteomics*. 2012;3:e129.
26. Yesufu HB, Hussaini IM. Studies on Dietary Mineral Composition of the Fruit of *Sarcocephalus latifolius* (Smith) Bruce (Rubiaceae). *J Nutr Food Sci*. 2014;4:113.
27. Qabaha K, Hassan WA, Mansour H, Thanigachalam S, Naser S Demographic and Blood Lipid Profiles in Correlation with Heart Attacks among Mediterraneans. *J Nutr Food Sci*. 2014;4:112.
28. Pereira H, Tomaz C, Cavaco J, Tavares-Ratado P Personality and Levels of Cholesterol and Glucose. *J Nutr Food Sci*. 2014;4:112.
29. Manju S, Paul Khurana SM Alternative Healthy Food Crops. *J Nutr Food Sci*. 2014;4:12.
30. Witkowska Z, Saeid A, Korczyński M, Dobrzański Z, Chojnacka K Biofortification of Meat with Microelements by Biological Dietary Feed Supplements. *J Nutr Food Sci*. 2014;4:112

31. Muleya E, Ahmed AS, Sipamla AM, Mtunzi FM, Mutatu W Evaluation of Anti-Microbial, Anti-Inflammatory and Anti-Oxidative Properties Artemisia afra, Gunnera perpensa and Eucomis autumnalis. J Nutr Food Sci. 2014;4:112.
32. Butnariu M Action and Protection Mechanisms of Free Radicals J Pharmacogenom Pharmacoproteomics. 2012;3:111.