

Applicability of Wild Edible Plants in the COVID-19 Pandemic Situation

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Abstract

Wild edible plants (WEPs) can be stated as natural species that can grow and reproduce in their natural environment deprived of being cultivated. Wild edible plants serve an important role to fulfillment of the diet of local habitat. Wild edible plants are not only important for their food quality but also a large contribution to the population's nutrition throughout the year. Now a day's wild edible plants play an important role as a cheap source of valuable food. A diet rich in wild edibles can present various health benefits as well as helping us to avoid potentially harmful food additives. Edible herbs are not only delicious but also important for their nutritional value as well as their medicinal properties. They are very beneficial for boosting immunity of today's pandemic situation like covid-19. Special steps should be taken for this inexpensive source of natural immunity booster food for a better tomorrow.

Key words: *Wild edible plants, food source, immunity booster, nutritional value*

Introduction

Wild edible plants are of great medicinal reputation since ancient period. Wild edible plants, that is plants which are not cultivated or domesticated (Bhatia *et al*, 2018). They play a vital role in food security. People reside in forests or forest side areas are largely depended on this type of wild edible plants for food and medicinal purposes. Wild edible plants are easily available and cheap source of food as well as medicine of natural origin. These plants are very much valuable for their nutrient potentials. Scientists are continuously eager for these plants which are nature's boon to humankind. The utilization of wild edible plants is connected with specific practical technique and knowledge, which is especially associated with life across the globe (Pinela *et al*, 2017). The shrubs and fruits are the most valuable and widely used throughout the year because their consumption fulfills various purposes (Ojelel *et al*, 2019). Diversity in diets has largely been recommended worldwide for most favorable human nutrition, better health, and overall human welfare (FAO *et al*, 2012). In relation to availability regarding yield, safety and enormous beneficial phytochemicals from those wild edible plant species makes them significantly essential to set up a large-scale technique of the cultivation of these potent species, in terms of both food value and profitability (Ceccanti *et al*, 2018). It is now established fact that

wild edibles have been an integral part of the diet, their availability in local food culture suggests their potential goodness and enrich with various micronutrients have been used for social welfare and they should be included in our national food policy for formal agriculture and encouragement (Ray *et al*, 2020).

Valuable phytochemicals present in wild edible plants:

Phytochemicals are the naturally occurring chemicals obtained from plants. A verity of natural chemicals is found from different wild edible plants. These chemicals compounds are potent nutrients as well as have different medicinal properties. It is a proven fact that the methanolic extracts of various wild edible plants have a significant amount of alkaloids, phenolics, flavonoids, proteins, carbohydrates, and Vitamin C (Swargiary *et al*, 2016). The phytochemical constituents of reliable quantity found from the fifteen wild edible fruits collected from Boda and Kolli hills, such as alkaloids, flavonoids, phenols, tannins and saponins (Anand *et al*, 2017). Potential phytochemical phenolic compounds like gallic acid, catechol, vanillin and salicylic acid were recognized and quantified by High Performance Liquid Chromatography (HPLC) From Western ghats of Tamil Nadu (Muthukrishnan *et al*, 2018). Likewise more and more phytochemicals are found from different regions of the world they have well known for their valuable medicinal properties. But also a ton of unknown phytochemicals from unknown wild edible plants are still unidentified and yet to be discovered.

Wild edible plants are a consistent immunity booster:

Wild edible plants are well known for their potential effects on human health due to the supply of many valuable nutrients, as well as health-promoting compounds. In this current pandemic situation scientists are eagerly searching for ways to boost our health and sustain our immune system to combat the covid-19 outbreak. Mother Nature provides many natural weapons in the form of wild plants which may be potential remedy to fight against such type of monster virus. Among the natural weapons in the form of plants such as, *Stellaria media* (Chickweed) are known for their clearing activity of any mucus in the respiratory system and also congestion in the lungs. *Achillea millefolium* (Yarrow) is very much useful for coughs and colds, also wonderful wild plant for lowering fevers. *Galium aparine* (Cleavers) stimulates lymph nodes to rinse out toxins and nurture blood system and this way very much helpful to boost our immunity (Scott, 2020). Wild edible plants reported as a valuable source for preventing diseases like Alzheimer's, hypertension and food poisoning also has antifungal activity acts as wonderful antihepatitis B drug (Shin *et al*, 2018). Wild edible plants shows a verity of disease prevention activity such as gastrointestinal diseases, glandular disorders, cardiovascular disorders, liver problems, sexual disorders, respiratory disorders and fever and a lot more (Iqbal *et al*, 2019). Consumption of wild edible fruits fulfills the protein, carbohydrates, fats, vitamin and mineral necessity of poor rural population, these plants plays a very important role for the welfare of countryside populations (Sharma *et al*, 2017). Wild edible plant parts mainly used were leaves, fruits, and stem. These edible plants offer food and nutrition for instance various essential amino acids, vitamins, and minerals to stay strong and healthy (Thakur *et al*, 2020). So from several studies it was now established fact that wild edible plants serves as a natural immunity booster. Wild edibles are hence very much effective to cope against covid-19 like pandemic situations.

Wild edible plants possess agricultural features

Cultivation of wild edible plants started since ancient period. Numerous so called wild edible origin are now domestic cultivated plants. Still a large variety of wild edibles are not cultivated due to lack of proper cultivation technique and allied conditions. For the sake of humankind these types of low cost highly medicinal, nutritive plants are required special attention for their cultivation. Study reveals that farmers' motivations as well as awareness are necessary to deal with wild edible plants are interrelated to their cultural benefit, predominantly in relation to use-value as well as apparent wealth (Cruz-Garcia, 2017). Informant consent discovered that various wild food plants are used as major caloric content and dietary composition to balance frequently repetitive diets (Ong and Kim, 2017). As per farmers concern, they give importance species with several utilize ideals and which are well known vegetables, though there are numerous challenges are there for conservation and management practices (Aryal *et al*, 2018).

Conclusion

It is noticeable that wild edible plants are nature's boon to humankind for immunity booster and are capable for fighting against any germ related pandemic such as covid-19. The phyto-chemicals associated with wild edible plants are the key factors to boost up immunity. These types of natural phyto-chemicals are scientist's main research topic now days. As these is a very wide area of research therefore an alliance of biologists, microbiologists, biotechnologists, biochemists, phyto-geographers, molecular biologists, pharmacologists and scientists of all the relevant study fields are extremely required. Extensive research and awareness in that field surly fulfill the food security as well as nutritional demand and supply of these types of immunity booster natural plants.

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