

# Use of natural extracts in pharmaceutical industry

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In contrast to the measurement of synthetic drugs, chemically active substances consist of a plethora of natural compounds. These activate to modulate and various other target systems in an organism. The herbal medicinal products are available with variable natural combinations.

To chiefly obtain the efficacy of the standardised medical plant, it is important to extract from the pharmaceutical natural extract products that are highly used. The evidence is based on phototherapy which makes the scientist verify the randomised clinical trials. In general wellbeing, a herbal medicinal product is made of natural extracts which are better to tolerate and offer superior benefit and risk ratio to intake synthetic drug is less.

The history of pharmaceuticals with plant extracts or natural extracts is linked from several thousand years. It is closely related, time and skill wise the origin has improved. Traditional Chinese Medicine has plant-base employed over the years to treat patients from the roots. Comparatively, the recent trend has changed over time.

Based on the marketplace analysis, plant extracts are estimated to be around US\$23.7 billion in the year 2019 which will outrange within

US\$59.4 billion by 2025. The rising side effects of synthetic flavours and benefits will offer phytomedicines and herbal extracts for fueling the market in the plant extracts. Along with the growth of research and development activities

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in plant extracts, there is increased popularity of convenience foods, which has effortlessly grown in the pharmaceutical and food and beverage industries too.

## What are plant extracts?

A plant is a substance that is an active ingredient having desirable properties present in it. This enables one to remove the plant tissue and treat it with solvents. It is used for a particular purpose like roots, berries, fruits, seeds, leaves,

and stems as well. In the pharmaceutical industry, the use of herbal medicine, flower extracts, and other plant extracts is largely observed that has an ever-lasting impact.



## Key advantages

- The rise in awareness related to the side effects of the synthetic fibre intake
- Growth of the research and development activities
- Increase in the popularity of convenience food that boosts the demand for plant extracts
- Health-wise benefits are enjoyed based on the herbal extracts and phytomedicines

## Challenges in the industry faced

- There is an inadequate supply of the raw materials and price fluctuation is even higher
- A Lack of awareness about the advantages have made the plant extracts in developing countries more effective
- The availability of substitutes and much adulterated products

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# Usage in pharma, personal, cosmetics

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**Application of pharmaceuticals and dietary supplements are holding the largest share in plant extracts**

The pharmaceutical and dietary supplement segments are among largest application areas for witnessing the plant extract market. It increases market awareness by increasing the herbal medicines in regard to the allopathy ones. As a result, the growing illness started creating a lot of stress in the daily lives that further demands more of the supplements in the daily lives. These supplements include herbal extracts and phytomedicines which naturally occur on the components. These scientific demonstrations leave a positive impact on the basic range of nutrition. It gives a section for growth.

**The fast growth of the market with plant extract is witnessed**

Leaves and herbs all are used to manufacture herbal medicines. It has gained a lot of popularity due among the consumers for the trend of using natural products rather than just using synthetic ones. Plants like rosemary, aloe vera, basil, thyme, clove leaves are highly rich in anti-oxidants which offer anti-microbial properties. This has left an extensive usage in the pharmaceuticals, personal and cosmetic industries as well.

The extensive application of the high Vitamin A, Vitamin K, Vitamin C, magnesium, iron, potassium, and calcium content, basil extracts are used in food and beverage applications. The use of mint extracts has broad applications in personal care and pharmaceutical products. This helps in treating allergies, fighting bowel infections, and treating common cold. Furthermore, many other green leaves and herb extracts have gained immense popularity across many industrial verticals which according to the properties offer beneficial results.

**Plants extracts are marketed based on type including**



- Essential oils
- Phyto-medicines
- Herbal extracts
- Flavours and fragrances
- Spices

**Plant extracts segmented based on applications**

- Pharmaceuticals & dietary supplements
- Cosmetics
- Others (personal care products and toiletries)
- Food and beverages

**Plant extract based on the source in the market**

- Rhizomes and roots
- Leaves
- Fruits, flowers, and bulbs
- Others (seeds, pods, and berries)
- Barks and stems

**Plant extracts based on the regions**

- North America
- Europe
- Asia Pacific

- RoW (South America and the Middle East and Africa)

**The top 10 players ruling in the plant extract industry**

The competitive landscape has offered an overview of the relative market position which is the key player for the plant extracts to operate. The based strength is projected on the business strategies and analysed on the proprietary models. The key players are adopted in the strategies where new product launches, collaborations, expansions, acquisitions, agreements, and joint ventures are witnessed.

1. Givaudan
2. PT Indesso Aroma
3. Sensient Technologies
4. VidyaHerba Private Limited
5. Dohler
6. Synthite Industries Private Ltd
7. Symrise AG
8. International Flavors and Fragrances Inc
9. PT Haldin Pacific Semesta
10. Arjuna Natural Extracts Ltd

To conclude patients have largely adopted the traditional herbal medicines for a long time. It has proven treatments to be most effective and assorted in terms of small molecules and pharmaceuticals which as active around the 1950s. This shows approximately how much natural products have effortlessly made manufacturing more efficient. 'Inspired by nature' is the key element in the pharmaceutical industry. The manufacturers of herbal medical products simply suffer from the increased market pressure. In the food supplement sector, an increase in regulation and innovation is seldom witnessed here. The method of implementing the outdated process will make the growth more effective in the long run. ○

*(The author is a leading pharmaceutical consultant)*

