ASHWAGANDHA ENTERS A ROOT-ONLY ERA IN INDIA

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As global interest in ashwagandha continues to rise, India's latest regulatory actions have placed renewed focus on one of the most important quality questions in the category: which part of the plant is being used?

Ashwagandha (*Withania somnifera*) has long held an important place in Ayurveda and is now one of the most recognized adaptogens in the global wellness market. Its use has expanded well beyond traditional applications and now spans stress support, sleep, cognitive health, sports nutrition, healthy aging, and overall resilience, with demand expanding rapidly across North America, Europe, Asia-Pacific, and emerging markets.

According to market data, ashwagandha continues to rank among the leading botanicals in the US stress-management category, reflecting its growing integration into mainstream wellness.

However, the growth of the category has also brought greater scrutiny to sourcing, labeling, and ingredient authenticity. One of the central concerns is the substitution or blending of ashwagandha root material with less expensive aerial parts, including leaves.

While such practices may reduce raw material costs, they can also create significant variability in chemical composition and raise questions about label accuracy, consistency, and product integrity.

Why root identity matters

The distinction between ashwagandha root and aerial parts is not simply a matter of tradition. It has implications for composition, safety assessment, regulatory interpretation, and clinical substantiation.

For centuries, Ayurvedic practice has primarily emphasized the use of ashwagandha root for internal consumption. This traditional position is increasingly being reinforced by modern analytical and regulatory considerations. Roots and leaves are not chemically identical, and the compounds present in each plant part may vary in type and concentration.

Published scientific literature indicates that aerial parts may contain different concentrations of certain withanolides compared with the root. Root-derived preparations have also been more widely studied in human clinical research, making them the primary reference point for consistency, quality, and regulatory alignment in many commercial applications.

In 2021, the Ministry of AYUSH issued guidance advising against the use of ashwagandha leaves in products intended for internal use.[1] This position aligned with broader concerns raised within the botanical industry regarding undeclared plant-part substitution and the need for stronger supply-chain verification.

What analytical testing has revealed

Analytical studies have shown that products marketed as root-derived may, in some cases, contain indicators of aerial part adulteration. Methods such as high-performance liquid chromatography (HPLC) and high-performance thin-layer chromatography (HPTLC) have been used identify plant-part-specific markers.

In one published study, researchers used high-performance liquid chromatography with UV detection to examine authenticated ashwagandha leaves, aerial parts, and roots sourced from India and Egypt. The researchers also evaluated 10 commercial extracts marketed as root-derived and tested them for flavonol glycosides, which are considered markers of aerial part adulteration. Only two of the 10 commercial samples were free from these markers, suggesting that many products declared as root-derived may have contained aerial plant material.[2]

A separate published analysis using high-performance thin-layer chromatography evaluated 584 commercial extract batches. The study reported that 14.0% of batches were rejected due to leaf residue, while 20.4% contained incomplete root material.[3] These findings point to the need for more robust identity testing and more precise quality-control systems across the ashwagandha supply chain.

Recent data from the National Medicinal Plants Board, Government of India, further illustrates the scale of ashwagandha leaf and aerial part movement in the supply chain. According to correspondence from NMPB, 4,698 tons of ashwagandha leaves were sold in 2024–2025, compared with 4,170 tons of roots.[4]

At the same time, these transactions are not necessarily reflected in publicly available export records, creating additional transparency challenges.

The global market has also seen instances where ashwagandha leaf extract has reportedly been described or marketed as root extract, further reinforcing concerns around adulteration and mislabeling.

Together, these findings underscore a broader issue: plant-part identity cannot be assumed. It must be tested, documented, and verified.

India's regulatory shift

In April 2026, Indian authorities moved from earlier guidance toward a stronger regulatory position. A directive issued by the Ministry of AYUSH, T-13020/4/2022-DCC-Part (2), stated that only ashwagandha roots should be used in Ayush formulations and that leaves and other aerial parts should not be used in such products. The directive also emphasized the need to declare the plant part used on product labels.[5]

This was followed by an advisory from the Food Safety and Standards Authority of India, F. No. RCD-15001/11/2021-Regulatory-FSSAI, which reinforced that roots and root extracts are the permitted forms for foods and nutraceuticals under existing regulations and directed enforcement authorities to monitor compliance.[6]

Given India's central role in the global ashwagandha supply chain, these developments are likely to influence ingredient sourcing, supplier qualification, and finished product expectations beyond the Indian market.

Raising the quality standard

For the global industry, the message is straightforward: ashwagandha quality assurance must become more specific, more transparent, and more routine.

Analytical verification should not be treated as an occasional audit step. Instead, it should be built into raw material sourcing, extraction, finished ingredient testing, and third-party quality review.

Methods such as HPTLC and HPLC provide practical tools for confirming plant-part identity and detecting the presence of aerial material where root-only material is claimed.

Supplier documentation also needs to evolve. Certificates of analysis that fail to clearly identify the plant part used are becoming increasingly insufficient. In a market facing greater regulatory and scientific scrutiny, documentation should specify whether the material is root, leaf, aerial parts, or a blend, and analytical testing should support that declaration.

Some manufacturers have already moved toward vertically integrated sourcing models, standardized extraction processes, and traceable supply chains to ensure consistency from cultivation through finished extract. When combined with validated testing protocols, these approaches provide a stronger framework for quality, compliance, and consumer trust.

Ashwagandha's place in modern wellness is well established. What is now under greater scrutiny is the integrity of the supply chain behind it.

As regulators, researchers, and responsible manufacturers continue to align around higher expectations, the industry has both the tools and the obligation to ensure that products labeled as root-derived are truly root-derived. The future of ashwagandha will not be shaped by demand alone, but by the standards the industry chooses to uphold.

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