Curcumin

Presentation by Primary Information Services www.primaryinfo.com

mailto:primaryinfo@gmail.com





Turmeric can be regarded as a good cash crop as it requires less water and less capital investment for its production, grows with comparatively less use of fertilizer, adoption of simple technology and has low disease infestation



Curcumin, the main bioactive component of turmeric has been shown to have a wide spectrum of biological actions viz. antiinflammatory, antioxidant, anticarcinogenic, antidiabetic and antimicrobial activities. The quantity and quality of curcumin vary due to the changes in ecological factors in different states of India



Curcumin is a yellow colored bioactive compound found in turmeric rhizomes. With wide range of applications in food, pharmacy and cosmetics industry, curcumin has substantial importance in the research world





Curcumin is the major constituent of curcuminoids and is bio-active.

The turmeric types with a high curcumin content appears in bright yellow colour while the turmeric with a low curcumin content appears in Orange yellow colour.



Several extraction and purification processes of curcumin from turmeric are in practice at the laboratory and industrial scales. Laboratory extraction methods include Soxhlet, microwave, ultrasonic, and supercritical extraction







Industrial scale extraction of curcumin can be done with Extraction of curcumin from turmeric using a solvent (ethanol), Separation of curcumin-laden solvent from spent rhizomes, Recovery of solvent and concentration of extracted solution using evaporation, Separation of curcumin from the oleoresin via crystallization and Drying to obtain curcumin powder



Leaching equipment, plate-and-frame filter, centrifuge, sedimentation, percolator, crystalizer, evaporator for solvent removal are the equipment required

Turmeric rhizomes are the main raw material required in the process





Curcumin market share is expected to rise over 110 million dollars by 2024 India is the largest manufacturer of curcumin with production exceeding 80% of global market.





Enhanced health consciousness, multiple health benefits of curcumin, and increased need of natural & organic supplements have fueled the demand for curcumin in the past few years, thus propelling the growth of the curcumin market. In addition, factors such as living a healthy life, rise in demand for organic-based foods as well as ayurvedic medicinal formulations, and innovations in pharmaceutical & skincare products using curcumin have supplemented the growth of the global curcumin market.



Curcumin has shown considerable anticancer effects against several different types of cancer, including prostate cancer, breast cancer, colorectal cancer, pancreatic cancer, and head and neck cancer both in vitro and in vivo.



Curcumin Market size is expected to reach USD 99.3 million by 2024



Pharmaceutical was the largest segment that accounted for more than half the share of the global industry revenue in 2017. Curcumin is used as an important ingredient in many medical and food applications owing to its anti-inflammatory, antioxidant, and cartilage building properties.





