

Sustainable Mint Processing

Mint farmers' efficiency and innovative solutions ensure a high quality, safe and sustainable mint supply.

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What is mint? When we speak about the commercial varieties of mint grown in North America, we are referring to Peppermint (*Mentha piperita*), Native Spearmint (*Mentha spicata*), Scotch Spearmint (*Mentha gracilis*) and Mentha Arvensis, and their selected sub-cultivars.

To offer historical perspective, the peppermint variety of mint was brought to the United States in the 1700s. It was originally cultivated in Massachusetts and spread to upper New York state in the early 1800s. Due to mint's principle disease enemy, verticillium wilt, mint cultivation migrated westward, and by the 1850s it was being cultivated in Michigan. By the 1900s, mint cultivation had spread to the northwestern United States. Today, the major production regions for mint in North America include Washington, Oregon, Idaho, Michigan, Indiana and Wisconsin. Lesser regions include northern California, South Dakota, southern Alberta, Canada, among others.

Mint processing in North America has evolved over the years to ensure the production of a high quality, safe and sustainable mint supply. Its evolution is a result of learning and application of technologies throughout the supply chain. To understand where we are today, we should begin with an understanding of where we have been. In the simplest of terms, mint has been grown and propagated farmer-to-farmer via the plant's rhizome, or root system. Mint is a sterile perennial plant that can be effectively propagated by digging up roots and replanting them in a new field. Historically, this has been the method used most successfully.

Once grown, mint was harvested, cut, allowed to dry, collected and hydro-distilled in tubs with water. The steam and water from distillation was condensed and the oil separated from the water by specific gravity and then collected. The oil was either used as-is or standardized in some fashion to meet specifications laid out in the Food Chemical Codex, various pharmacopeia or for a specific customer need. This basic process is still practiced in many parts of the world, but in North America, the process has evolved to produce a higher quality product with reproducibility.

MINT PRODUCTION STEPS

The steps to obtaining high quality plants are as important as the final distillation of the oil from the field. We will investigate each production step to gain an understand-



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