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A Review Article On "Matricaria Chamomilla (German Chamomile)."

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Abstract: German chamomile (M. chamomilla) is recognized as a star herb due to its medicinal and aromatic properties. This plant is found across a wide range of climatic and soil conditions. Both the flower heads and blue essential oils of German chamomile possess several pharmacological properties of an antiinflammatory, antimicrobial, antiseptic, antispasmodic and sedative, etc., nature, which makes it a highly sought after herb for use in many pharma and aroma industries. Chamomile tea, prepared from its flower heads, is also a well-known herbal tea for mind and body relaxation. Though it is a high-demand herb, farmers have not adopted this plant for large scale cultivation as a crop, which could improve their livelihood, due to the high cost in flower heads harvesting, loss in over mature and immature flower heads picking during harvesting, unavailability of varieties and Agro technologies for machine harvesting, a lack of efficient process development of oil extraction and in the lack of improved stable varieties. There are many studies that have reported on the phytochemistry and pharmacological uses of chamomile, which further explore its importance in the medicine industry. Several studies are also present in the literature on its cultivation practices and plant ecology. However, studies on breeding behavior, genetic improvement, varietal development and mechanical harvesting are scarce in German chamomile. Hence, keeping in mind various aspectsof farmers' and researchers' interest, earlier reports on taxonomy, floral biology, processing of oil extraction, active constituents, uses, agronomy, breeding challenges and opportunities in German chamomile are summarized in this review.

Keywords: Chamomile; pharmacological uses; genetic improvement; agronomy; essential oils

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