Ta'limning zamonaviy transformatsiyasi CAPERS (Capparis spinosa L.) – MEDICINAL PROPERTIES AND GROWING METHODS

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Abstract: This article examines the medicinal properties of the caper plant, including information about its distribution, availability of raw materials, chemical composition, and traditional use in folk medicine.

Keywords: medicinal plants, life forms, fruits, harvesting, raw material quality, chemical composition, habitats, geographic distribution, medicine.

Introduction: Capers, known scientifically as Capparis spinosa L., are perennial plants belonging to the Capparaceae family. They thrive in warm, arid regions and can grow up to 1 meter in height. These plants produce spiny stems with fleshy, round leaves and showy white to pinkish flowers. The edible part, the caper bud, is often pickled and used as a condiment in various culinary dishes.

Distribution and Habitat: Capers are native to the Mediterranean region, where they are widely distributed across Southern Europe, North Africa, and parts of Asia. The plant thrives in rocky, well-drained soils and is often found growing in harsh environments, such as coastal cliffs, dry riverbeds, and arid regions. Due to their hardiness, capers have been successfully cultivated in regions such as Greece, Turkey, Italy, and Morocco.

Chemical Composition: Capers are rich in vitamins and antioxidants, making them valuable for both culinary and medicinal use. The buds contain flavonoids, such as quercetin and kaempferol, which contribute to their antiinflammatory and antioxidant properties. In addition, capers are a source of rutin, an essential compound for improving blood circulation and reducing cholesterol levels. The plant's chemical profile also includes glucosinolates, which have been studied for their potential anticancer properties.

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Ta'limning zamonaviy transformatsiyasi

Historical Use: Historically, capers have been used in traditional medicine for various purposes, including the treatment of digestive disorders, rheumatism, and skin diseases. The Greeks and Romans valued capers for their ability to alleviate flatulence and promote good digestion. Additionally, caper extracts have been used as a natural remedy for liver detoxification and as a diuretic.

Effects on the Body: Capers have multiple health benefits. Their antioxidant content helps protect cells from oxidative damage, while their anti-inflammatory properties can reduce the symptoms of arthritis and other inflammatory conditions. Capers also promote digestive health by stimulating the production of digestive enzymes. The rutin in capers contributes to cardiovascular health by strengthening capillaries and reducing the risk of varicose veins and hemorrhoids.

Applications: In modern herbal medicine, capers are used as a natural remedy for improving liver function, boosting immunity, and promoting healthy digestion. They are commonly incorporated into detoxification programs due to their diuretic properties, which help flush out toxins. Additionally, caper-based supplements are marketed for their potential to improve skin conditions such as eczema and psoriasis. Caper buds, when consumed regularly, may also help regulate blood sugar levels, making them beneficial for people with diabetes.

Growing Methods: Cultivating capers requires a sunny location with welldrained, rocky soil. The plant is drought-resistant and can tolerate poor soils, making it ideal for arid regions. Capers are typically propagated from seeds, but they can also be grown from cuttings. The best time for planting is during the early spring, once the danger of frost has passed. Capers require minimal water once established but benefit from occasional irrigation during extended dry periods. Harvesting occurs in the summer when the buds are still firm and unopened. Handpicking is the most common method of harvesting capers, and care must be taken to pick the buds at the right time to ensure optimal flavor. After harvesting, the buds are typically cured in brine or vinegar to enhance their flavor and prolong their shelf life.

Conclusion: Capers are more than just a flavorful addition to Mediterranean

Ta'limning zamonaviy transformatsiyasi

dishes; they are a medicinal plant with a rich history of traditional use. From promoting digestion to offering antioxidant benefits, capers have earned their place in both the culinary and medicinal worlds. With their ability to thrive in challenging environments, capers are also a promising crop for sustainable agriculture in arid regions.

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