

Chapter 14

Pharmacology and Phytochemistry of Coriander

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ABSTRACT

Coriander, named as Coriandrum sativum Linn, belongs to the family Umbelliferae and is one of the most popular and well-known spices/condiments and herbal medicines. The essential oils and fatty oils are the two major active chemical constituents present in the plant. The other minor ingredients found to be present are monoterpenes hydrocarbons i-e limonene, γ -terpinene, α -pinene, p-cymene, borneol, citronellol, camphor, geraniol, and geraniol acetate and abt heterocyclic components such as pyrazine, pyridine, thiazole, furan and tetrahydrofuran derivatives, isocoumarins, coriandrin, dihydrocoriandrin, coriandrins A-E, flavonoids. The volatile oil from the leaf contains aromatic acids such as 2-decenoic acid, E-11-tetradecenoic acid, undecyl alcohol, tridecanoic acid, capric acid, undecanoic acid, and more. The current pharmacological research reveals the application of coriander has antibacterial and antifungal activity.

INTRODUCTION

The genus *Coriandrum* has included two species, the cultivated species *C. sativum* and wild species *C. tordylium*. The name 'cilantro' has been randomly as well as frequently employed in American English which is referred to as *green herb* or *dried leaves*. The origin of *Coriandrum sativum* is still unknown; even many authors and scientists have described coriander to be as a wild plant in nature. But no specific information is available about the same fact. In 1780, Linnaeus had reported coriander occurred as a

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weed in cereals (Diederichsen, 1996). The 'Coriandrum' is coined from koros, referring to the disagreeable odor of the leaves (Shelef, 2003).

Family: *Umbelliferae* Juss. ;455 genera; 3600-3751 species

Subfamily: *Apioideae* Drude; 404 genera; 2827-2936 species

Tribe: *Coriandreae* W. Koch; 8 genera; 21 species

Genera: *Bifora* F. Hoffm.; 3 species

Common Names Used Worldwide (Diederichsen, 1996).

Arab :kuzbara, kuzbura

Armenian :chamem

Chinese :yuan sui, hu sui

Czec :koriandr

Danish :koriander

Dutc :koriander

English :coriander, collender, chinese parsley

Ethiopian :dembilal

French :coriandre, persil arabe

Georgian :kinza, kindza, kindz

German :koriander, Wanzendill, Schwindelkorn

Greek :koriannon, korion

Hindi :dhania, dhanya

Hungarian :coriander

Italian :coriandolo

Japanese :koendoro

Malay :ketumbar

Persian :geshnes

Polish :kolendra

Portuguese :coentro

Rumanian :coriándru

Russian :koriandr, koljandra, ki nec, kinza, vonju ee zel'e, klopovnik

Sanskrit :dhanayaka, kusthumbari

Spanish :coriandro, cilantro, cilandrio, culantro

Swiss :chrapfechörnli, Böbberli, Rügelikümme

Turkish :kisnis

Vernacular Indian Names(Diederichsen, 1996).

Bengali : dhane, dhania

Gujarati : kothmiri, konphir, libdhane

Kannada : kothambri, kothmiri bija

Kashmiri : daaniwal, kothambalari

Malayalam : kothumpkalari bija, kothumpalari

Marathi :dhana, kothimber

Oriya : dhania

Punjabi : dhania

Tamil : kothamali

Telugu : dhaniyalu

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