GINGER, FROM THE DINING TABLE STRAIGHT TO THE PHARMACY

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Ginger (Zingiber officinale Roscoe) is a perennial tropical plant (Fig. 1, ref.1), grown in the Orient under various names, namely ada, adrak, aradraka, adu, ale, allamu, gyn, halia bara, ingiver, inchi, inji, sonthi. In Czech zázvor, in German Ingwer. It is from the family Zingiberaceae together with turmeric, cardamom or galangal. Its rhizome is used, as a food and a medicinal drug, whether fresh, pickled, candied, or ground dried, or as oil and resin (oleoresin) obtained from it, the latter two with the attribute GRAS (Generally Recognized As Safe)2. It is necessary to distinguish it from ginger-grass (Cymbopogon martini) or black ginger (Kaempferia parviflora).

It has been grown in the world since time immemorial, producing more than 4 million tons per year, mostly in India. Productivity is around 3.5 t/ha (ref.3), whereas its production is known to be increasingly threatened by fungal infestation4. They mention it as a useful medicinal plant 4,000 years ago also the Vedas5, TCM6, Dioscorides7 a Matthioli8. The chemical literature shows a growing interest in this drug, when in 2021 the Chemical Abstracts Service registered 351 citations, as shown in the graph in Fig. 2.

Ginger is one of the most commonly consumed herbal drugs with significant pharmacological and physiological activities. It is widely used in folk medicine, for various diseases, including chronic diseases such as diabetes in general10,11, diabetic nephropathy12, diabetic retinopathy13, type 2 diabetes (ref.14), many types of tumours15-19, ulcers20,21, Alzheimer disease22,23, cardiovascular disease24,25, pulmonary fibrosis26, arthritis, pain, poisoning27, viroses28, a depressions29. The beneficial effect of ginger in these diseases lies primarily in its antioxidant30, antimicrobial31, fungicidal32 and anti-inflammatory properties33 and, among other things, it reduces the problems of kinetosis34, migraines35, lowers lipid levels36, mild nausea and vomit-
REFERENCES

Abstract

Common food and spice, ginger contains a plethora of biologically active compounds that may serve as a basis for pharmaceutical exploitation.

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