

# THE USE OF SAFFRON EXTRACT IN THE TREATMENT OF PLEURISY IN TRADITIONAL MEDICINE

## ПРИМЕНЕНИЕ ЭКСТРАКТА ШАФРАНА ПРИ ЛЕЧЕНИИ ПЛЕВРИТА В НАРОДНОЙ МЕДИЦИНЕ

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### Abstract

*The article compares the effects of drugs and natural herbs used in the treatment of pleurisy in modern medicine and folk medicine. The article discusses the negative side effects of some synthetic drugs. The possibilities of using saffron (*Crocus sativus* L.) in the treatment of pleurisy are considered.*

### Аннотация

*В статье сравнивается действие лекарственных препаратов и натуральных трав, используемых при лечении плеврита в современной медицине и народной медицине. В статье рассматриваются негативные побочные эффекты некоторых синтетических препаратов. Рассмотрены возможности использования шафрана (*Crocus sativus* L.) при лечении плеврита.*

**Key words:** *pleurisy, saffron, sugar content, crocin, crocetin, safranal, zeaxanthin.*

**Ключевые слова:** *плеврит, шафран, содержание сахара, кроцин, кроцетин, сафранал, зеаксантин.*

Pleurisy is an inflammation of the lungs, sometimes caused by rheumatism, tuberculosis, infectious and allergic diseases, and in some cases, chest trauma. Pleurisy is not usually considered an independent disease, so it has infectious and non-infectious forms. A distinction is made between dry and exudative pleurisy, with exudative pleurisy occurring after dry pleurisy. Symptoms of this disease include hot flashes, sweating, muscle spasms, weakness, loss of appetite, and shortness of breath. Acute pleurisy often begins with chest pain, which intensifies with coughing or deep breathing. The patient begins to feel unwell and develops a fever [1].

Modern medicine uses various synthetic drugs to treat pleurisy. These include isoniazid, streptomycin, ethambutol, rifampicin, analgin, and aspirin. Although these and similar pharmaceuticals are considered effective in treating the condition, there is evidence that their use can cause a number of harmful side effects that pose a threat to human health and life.

Below we will consider some of them: Isoniazid - isonicotinic acid hydrazide is widely used in the treatment of tuberculous pleurisy. However, in studies, patients taking this drug experienced rashes, headaches, sleep disturbances, hallucinations, and gastrointestinal disturbances [2].

There are warnings that streptomycin may cause hearing loss, ethambutol may cause nausea, headache, and fatigue, liver problems, allergic reactions, and serious kidney problems, rifampin may cause congestive heart failure, nausea, vomiting, diarrhea, and loss of appetite, and analgin may cause kidney failure, red urine, leukopenia, and thrombocytopenia. Patients who are allergic to aspirin, ibuprofen, or naproxen, or who have asthma, stomach ulcers, diabetes, or gastritis are advised to consult a doctor before taking aspirin [3].

Given the above information, when treating pleurisy, it's probably best to resort to folk remedies, which are relatively safe and harmless.

In folk medicine, various infusions and ointments made from natural products such as mustard, camphor, lavender, and eucalyptus oils, turnip, centipede, butterfly pea, reed, marvak, wild carrot seeds, grapes and grape juice, honey, and grape leaves are used to treat pleurisy [1].

Given the attention paid to the cultivation and use of saffron in our country in recent years, it is appropriate to consider its potential use in folk medicine for the treatment of pleurisy.

The anti-inflammatory effect of saffron is undoubtedly due to its powerful antioxidant and free radical scavenging properties, which are primarily attributed to crocetin and crocin. Radical scavenging properties are found not only in crocin but also in safranal. All tested samples demonstrated a concentration-dependent effect and a synergistic effect between these two saffron components [4].

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