

# A Review of the medicinal applications of *Tanacetum parthenium* (feverfew)

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## ABSTRACT

The purpose of this paper is to describe the medicinal plant *Tanacetum parthenium* popularly known as feverfew and to elucidate the medicinal uses of this plant which has wide range of uses. The most important uses include the prevention of migraine headache. It is a medicinal herb which is also sometimes grown for ornamental purposes. It is sometimes referred to as bachelor's buttons or more commonly as feverfew.

**KEY WORDS:** Fever few, Medicinal plants, *Tanacetum parthenium*, Medicinal application

## INTRODUCTION

*Tanacetum parthenium* (feverfew) is a traditional medicinal herb which is commonly used to prevent migraine headaches and is also occasionally grown for ornament.<sup>[1]</sup> The plant grows into a small bush up to the height of 46 cm (18 in). It has citrus-scented leaves and is covered by flowers resembling daisies. It spreads rapidly covering a wide area within a couple of years. It is also commonly seen in the literature by its synonyms, *Chrysanthemum parthenium* and *Pyrethrum parthenium*.<sup>[2]</sup> It is also sometimes referred to as bachelor's buttons or feather-few.

### History

The word "feverfew" is derived from the Latin word febrifugia, which means "fever reducer."<sup>[3]</sup> Although the analgesic property of it is under question.<sup>[4]</sup> Although its earliest medicinal use is unknown, it was documented in the 1<sup>st</sup> century Alzheimer's disease as an anti-inflammatory by the Greek herbalist physician Dioscorides.

### Cultivation

It is a perennial herb that is planted in full sun, 38–46 cm (15–18 in) apart and grows up to 61 cm (24 in) tall. It is hardy to USDA zone 5 (–30°C [–22°F]) and should be cut back to the ground in the autumn.<sup>[5]</sup> It can become an invasive weed outside of its native range. Feverfew is native to Eurasia, especially the Balkan Peninsula, Anatolia, and the Caucasus. However, its cultivation has spread it around the world and is now found in the rest of Europe, North America, and Chile.<sup>[6]</sup>

### Feverfew and Migraine

Feverfew is used as a preventative (or prophylactic) treatment for migraine. It is reported that feverfew the frequency of migraines and in few cases has stopped it altogether.<sup>[3]</sup> Until recently, only a few scientific studies into the use of feverfew had been conducted, and those few had been small in scale. However, a well-designed trial published in 2005 has attested to the efficacy of feverfew as a viable preventative treatment for migraine.<sup>[7]</sup>

### Other Uses

Feverfew is also used for fever, irregular menstrual periods, arthritis, a skin disorder called psoriasis, allergies, asthma, ringing in the ears (tinnitus), dizziness, and nausea and vomiting.<sup>[8]</sup> Some people use feverfew for difficulty getting pregnant or fathering a child (infertility).

#### Access this article online

Website: [jprsolutions.info](http://jprsolutions.info)

ISSN: 0975-7619

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Received on: 15-08-2018; Revised on: 17-09-2018; Accepted on: 26-10-2018

It is also used for “tired blood” (anemia), cancer, common cold, earache, liver disease, prevention of miscarriage, muscular tension, bone disorders, swollen feet, diarrhea, upset stomach, and intestinal gas.<sup>[9]</sup> Feverfew applied directly to the gums can relieve toothaches or kill germs when applied to the skin.

### Principle of Working

Feverfew leaves contain many different chemicals including one called parthenolide.<sup>[10]</sup> Parthenolide or other chemicals decrease factors in the body that leads to migraine headaches.

### Forms in which it can be taken

Freeze-dried capsules - it is recommended since the teas and fresh leaves leave a bitter taste and may also cause irritation to the soft tissues in the mouth. Feverfew capsules are available at chemists and health stores. The dosage of any preparations must be checked before you buy as these can differ widely.<sup>[11]</sup> A daily dose of 250 mg is usually enough.

Prepared tablets - feverfew tablets are also available at the chemists and health stores.

Tincture - feverfew used to be taken for a very wide range of conditions and so, for example, was applied to the skin in tincture form for the treatment of painful or itchy insect bites. Some herbalists still recommend this but since the 1970s feverfew is mainly used for migraine prevention.<sup>[3]</sup>

Teas - feverfew tea can be made from the leaves, but this can leave a bitter taste and may irritate your mouth.

### Side Effects

Feverfew should not be taken during pregnancy as it can cause contractions. As feverfew is similar to aspirin and other nonsteroidal anti-inflammatory drugs such as ibuprofen, it is probably best not to take both at the same time.<sup>[12]</sup> As with aspirin feverfew should not be taken if you are breastfeeding. Some people find that feverfew leads to mouth ulcers in addition to minor skin irritations. However, heart rate, blood pressure, or weight are not altered by feverfew. Less common side effects may include nausea, digestive problems, and bloating. People who take feverfew for a long time and then stop taking it may have difficulty sleeping, headaches, joint pain, nervousness, and stiff muscles.<sup>[13]</sup> People can have allergic reactions to feverfew. Those who are allergic to other members of the daisy family (which includes ragweed and *Chrysanthemums*) are more likely to be allergic to feverfew.<sup>[14]</sup>

## CONCLUSION

These are some of the uses of feverfew *T. parthenium*.<sup>[15]</sup> This perennial herb is rich with medical properties and is used, especially in the treatment of migraine headaches in addition to other medicinal uses which gives it enormous potential for applications in the medical field. However as mentioned, it can lead to serious side effects. Therefore, more research is needed to study the pharmaceutical applications of this plant before it is incorporated into mainstream medicine.

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Source of support: Nil; Conflict of interest: None Declared