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Impatiens balsamina: An alternative naturopathy

Santwana Samilita Dash^{1*} & Sanjeet Kumar¹

¹Centurion University of technology and management, Odisha, India

²Ambika Prasad Research Foundation, Odisha, India

*Email-Id: ssdash02@gmail.com

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ABSTRACT

Impatiens balsamina is an annual growing to 0.6 m (2ft) by 0.5 m (1ft 8in) at a medium rate. It is frost tender. The species is hermaphrodite (has both male and female organs) and is pollinated by Insects. Suitable for: light (sandy), medium (loamy) and heavy (clay) soils and can grow in heavy clay soil. Suitable pH: mildly acid, neutral and basic (mildly alkaline) soils. It can grow in semi-shade (light woodland) or no shade. It prefers moist soil. Edible parts of the plant are leaves, shoots and seed and mostly used as soil. The plant is cathartic, diuretic and emetic. It is used in the treatment of pains in the joints. The leaf juice is used as a treatment against warts. The flowers are cooling, mucilaginous and tonic. They are useful when applied to burns and scalds. The juice of the flowers is used to treat snake bites. The flowers, and their alcoholic extract, possess marked antibiotic activity against some pathogenic fungi and bacteria. The seed is expectorant and has been used in the treatment of cancer. The powdered seeds are given to women during labor in order to provide strength.

INTRODUCTION

Impatiens balsamina, commonly known as balsam, garden balsam or spotted snap weed is a species of plant native to India and Myanmar. It is an annual plant growing to 20–75 cm tall, with a thick, but soft stem. The leaves are spirally arranged, 2.5–9 cm long and 1–2.5 cm broad, with a deeply toothed margin.

The flowers are pink, red, mauve, purple, lilac, or white, and 2.5–5 cm in diameter; they are pollinated by bees and other insects, and also by nectar-feeding birds. The ripe seed capsules undergo explosive dehiscence (Wang et al. 2009).

In Human use

Different parts of the plant are used as traditional remedies for disease and skin afflictions. Juice from the leaves is used to treat warts and snakebite, and the flower is applied to burns (Hua et al. 2001).

The extracts of *I. balsamina* also showed a long-lasting skin moisturizing effect and prevent dryness, rough skin chap, dandruff and splitting hair ends, hence are used to prepare lotions, creams, hair tonics, cosmetics, bath preparations and detergents (Park et al. 2003).

Different parts of the plant are used to treat disease and skin afflictions; the leaves, seeds and stems are also edible if cooked (Hua et al. 2001).

Impatiens balsamina L. has been used as indigenous medicine in Asia for the treatment of rheumatism, fractures and fingernail inflammation (Ishiguro et al. 2000).

Modern chemical and pharmacological studies have identified flavonol and naphthoquinone derivatives, some of which have strong antimicrobial, anti-anaphylaxis, anti-inflammatory as well as itching alleviating and anti-dermatitis activities, as the main chemical components of this plant (Li et al. 2011).

The seeds of this plant are edible. Alcoholic extract of the flowers has been found to have adequate antibiotic activity against sclerotizing, fructicola, and other pathogenic fungi and bacteria. It is reported to be useful for pains in the joints (Park et al. 2003).

The seeds of *Impatiens balsamina* were extracted with respective solvents. The successive seed extracts of the plant were tested for their antimicrobial activity. The seed extract in various solvents have been found to possess promising antibacterial and antifungal activities. The plant has been reported to have various pharmacological activities such as antibacterial, antimicrobial, antifungal analgesic, antioxidant, anticancer, antitumor, anti-inflammatory, anti-dermatitic acute toxicity mosquito larvicidal activity. This review intends to summarize

diverse studies on this plant and critically evaluates the issues associated with ethnomedicinal uses, phytochemistry, pharmacology and toxicology of *Impatiens balsamina* (Wang et al. 2009).

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