Eclipta prostrata

TAXONOMIC CLASSIFICATION:[1]



• Kingdom: Plantae

• Division: <u>Tracheophyta</u>

• Class: Magnoliopsida

• Order: Asterales

• Family: Asteraceae

• Genus: <u>Eclipta</u> L

Species: Eclpta prostrata

INTRODUCTION:[2]

Eclipta prostrata is an herbaceous plant, usually annual, branched, erect or prostrate, which measures up to 80 cm high. It is entirely covered with short stiff and white hairs. The leaves are opposite, simple, sessile or very shortly-stalked, with elongated oval to lanceolate lamina, rough to the touch. The white flowers are grouped into sub-globular long pedicellate capitulum, in solitary or by 2 or 3, terminal or axillary. The flowers are of 2 types: tubular flowers in the center, more numerous, ligulate flowers on the periphery. The fruit is a compressed warty achene, brown or black in color. The first leaves are short-stalked, simple and opposite. The petiole measures 1 to 1.5 mm long. It is densely covered with applied hairs. The lamina is oval (4.5 to 6.8 mm long and 3.2 to 3.8 mm wide), with obtuse base and rounded tip. It is covered on both sides with short stiff and white hairs. Venation is pinnate. The margin is slightly serrated near the base and ciliated. Annual or briefly perennial herbaceous plant, branched, erect or prostrate, then erect, measuring 10 to 80 cm high. The part of the stem in contact with the ground take roots at the nodes. The plant is completely covered with short white stiff and applied hair. The whole plant turns black as it dries. The stem is cylindrical, slightly fleshy, more or less woody at the base. It is densely covered with

short stiff white hairs, applied and directed upwards. Its color varies from green to violet, is in general rather reddish. The flowers are white, of 2 types. The flowers in the center are tubular, bisexual, small and numerous. These of the margin are ligulate, female or neutral. They are less numerous and form a fringe around the capitulum. The fruit is a cuneiform compressed achene, 2 to 3 mm long, with more or less thickened margin, very warty. It is brown or black. It lacks egret but have short white hairs at the top. This plant that flowers throughout the year has a very important seed production (a plant can produce up to 17,000 seeds).

PROPERTIES AND USES:[3]

- In Hemoptysis
- In Hematemesis
- In Hematuria
- In Epistaxis
- In Uterine bleeding,
- In Skin diseases,
- In Respiratory disorders,
- In Coronary heart disease,
- In Hair loss,
- In Vitiligo

DOSAGE: [3]

- Fresh juice- 5-10ml
- Powder- 250mg-2gm in divided dose per day

SIDE EFFECTS OF EXCESS CONSUMPTION:[4]

The active ingredient, *Eclipta* has a diuretic effect and may cause increased urination if taken orally. Bhringraj oil should be used with caution if taking diuretics (water pills) such as <u>Lasix</u> (furosemide), as this can lead to excessive urination and a drop in blood pressure (hypotension).

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RESEARCH:

- 1. The methanolic extract of leaves of Eclipta prostrata Linn was investigated for anti-inflammatory activity in albino Wistar rats. The methanolic extract administered by the oral route at a concentration of 100 and 200 mgkg -1 showed the significant dose dependent anti-inflammatory activity in carrageenin and egg white induced hind paw oedema in rats. Anti-inflammatory activity of the tested extract was comparable with that of the standard drug indomethacin (10 mgkg -1) and cyproheptadine (8 mgkg -1). The results lend support to the traditional use of E. prostrata in the treatment of inflammatory diseases.[5]
- 2. Eclipta prostrata, a traditional Chinese medication, has been used for the treatment of several diseases. However, the molecular mechanism underlying the effects of Eclipta prostrata extracts (EPE) on human oral cancer cell metastasis remains unclear. We thus examined the effects of EPE on metastasis promoting proteins in oral cancer. Our results revealed that the EPE attenuated SCC-9, HSC-3, and TW2.6 cell migration and invasiveness by reducing matrix metalloproteinase (MMP)-2 enzyme activities. In addition, Western blot analysis revealed that EPE significantly reduced the levels of phosphorylated extracellular signal-regulated kinase 1/2 (ERK 1/2) but not those of c-Jun N-terminal kinase (JNK) 1/2 and p38. In conclusion, we found that EPE could inhibit oral cancer metastasis through the inhibition of MMP-2 expression. Therefore, EPE may be used to prevent the metastasis of oral cancer, and has the potential to be applied to cancer treatment.[6]

SPECIAL PRECAUTIONS & WARNINGS:[7]

- In Pregnancy and breast-feeding
- In Diabetes
- After Surgery

INTERACTION WITH MEDICATIONS:[7]

- Medications for diabetes (Antidiabetes drugs)
- Medications for high blood pressure (Antihypertensive drugs)

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