



Phenol profile in *Tephrosia purpurea* and their possible pharmacognostic implication

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Abstract : *Tephrosia purpurea* is a common weed constituting several phytochemicals of great significance. This preliminary study conducted to study presence of phenol as an important phytochemical compound having pharmacognostic implication has been carried out. Chromatographic paper separation has been done to observe phenol profiling. The different coloured spot observed confirms presence of phenol. The Rf value of the sample matched the standard Rf values of Phenolic compound. The profile detected has been found to be Coumarin, Flavonoid glycoside and Phenolic glycoside. Based on this result it can be suggested that *Tephrosia purpurea* is a common weed with pharmacognostic potential and can be an ideal test system for further studies.

Keywords: *Tephrosia purpurea*, Coumarin, Flavonoid glycoside, Phenolic glycoside.

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Introduction:

Phenol, also known as carbolic acid, is an aromatic organic compound with the molecular formula C_6H_5OH . It is a white crystalline solid which is volatile. The molecule consists of a phenyl group ($-C_6H_5$) bonded to a hydroxyl group ($-OH$) (Smith and March, 2007). *Tephrosia purpurea* is a small shrub that grows up to 1.5 meters tall. It has bipinnate leaves with 7 to 15 leaflets, the terminal leaflet being solitary. The leaflets are 10 to 32 mm long and 5 to 11 mm wide (Dal Wadi et al., 2014). Recent studies in Ayurveda have reported that the plant is digestible, anthelmintic, alexiteric, antipyretic and cures diseases of liver, spleen, heart, blood, tumours, ulcers, leprosy, and asthma, Sharma (1983). According to Unani system of medicine, its root is diuretic, enriches blood, cures diarrhoea, useful in bronchitis, asthma, liver disorders, and in spleen diseases (Arnold and Harry, 1968). Leaves are tonic for intestines and used as an appetizer. It is used in the treatment of piles, syphilis and gonorrhoea. Leaves are also used as fodder.

Materials and Methods:

Leaves of *Tephrosia purpurea* were collected from Walmi, Phulwari Sharif, Patna. About 100 gms of the leaves were macerated with methanol and