

These powder samples were stored in an air tight bottle.

Aqueous extract was prepared by heating 5 Gram of dried powder in 50 ml of distilled water for two hours at a low heat. After 2 hours, it was filtered through the filter paper. (Saklani et al., 2011) Samples were extracted by methanolic extracts and by soaking 5 gram of sample powder in 50 ml of 90% methanol for 24 hours at ambient temperature. The mixture was then filtered. The methanolic extract was then centrifuged at 5000 RPM for 10 minutes. The filtrate was obtained as a final extract and was subjected to different phytochemical tests.

The aqueous and methanolic extract of leaf of Tulsi, Neem and Curry were taken for phytochemical test to detect the main chemical groups. (Devmurari and Jivani, 2010).

Now the method of the test were as follows: The methanolic extract of the crude dry powder was evaporated to dryness in a water bath. The Residue was dissolved in dilute HCl and filtered and the filtrate was divided into two equal portions. One portion was treated with Mayer's Reagent and another portion was treated with equal amount of Wagner's Reagent. The creamish green and brown precipitate indicate the presence of a respective alkaloid. (Salehi-Surmaghi et.al., 1992).

The aqueous extract of crude dry powder was treated with alcoholic FeCl_3 reagent, the black precipitate indicates the presence of tannin.

2ml of aqueous and methanolic extract was taken in a separate test tube. 3ml of chloroform along with 2ml of concentrated H_2SO_4 was added, the reddish-brown colour is the indication of the presence of terpenoid. (Kapoor et al., 1969).

2ml of aqueous and methanolic extract was taken separately and added a few drops of FeCl_3 solution in it, dark green colour formation indicates the presence of phenol.

2ml of aqueous and methanolic extract was taken separately and added two to three drops of alcoholic β -naphthol solution with 2ml of concentrated sulfuric acid, the appearance of violet colour indicates the carbohydrate. (Devmaurari and Jivani, 2010).

Few ml of aqueous and methanolic extract was taken separately and added two drops of concentrated H_2SO_4 . The appearance of crimson colour indicates the presence of flavonoid. (Singh et al., 1982)

Few ml of aqueous and methanolic extract was taken separately and 1ml concentrated nitric acid was added in each of the test tubes. The faded green solution was obtained. The solution was then heated for one minute and cooled under tap water. It was then made alkaline using excess of 40% of sodium hydroxide, formation of light orange precipitate is an indication of the presence of protein. (Lowry et al., 1951). Presence of functional group in the sample was detected by FTIR. The IR spectrum of the methanol and aqueous extract of Tulsi, Neem, Curry was recorded in a FTIR Spectroscopy.

Results and Discussion:

Various bioactive molecules were found in Tulsi, Neem and Curry leaf extract. From phytochemical screening the amount of extract is more in case of organic solvent methanolic than that of water. The phytochemical analysis of Tulsi, Neem, Curry leaves extracted in 2 solvent i.e methanolic and aqueous, are summarised in Tables 1, 2 and 3. The phytochemical screening of the aqueous extract of the leaves revealed that all the main constituents responsible for nutritional and antinutritional factors present in the leaves extract.

Table 1. Phytochemical Screening of Leaf Extract of *Ocimum sanctum* (Tulsi)

S.No	Phytochemical constituent	Aqueous	Methanolic
1	ALKALOID	-	+
2	TANNIN	+	-
3	TERPENOID	+	-
4	PHENOL	+	+
5	CARBOHYDRATE	+	-
6	FLAVONOID	+	-
7	PROTEIN	+	+

Present(+), Absent(-)

Table 2. Phytochemical Screening of Leaf Extract of *Azadirachta indica* (Neem)

S.No	Phytochemical constituent	Aqueous	Methanolic
1	ALKALOID	-	+
2	TANNIN	+	-
3	TERPENOID	+	-
4	PHENOL	+	+
5	CARBOHYDRATE	+	-
6	FLAVONOID	+	-
7	PROTEIN	+	+

Present(+), Absent(-)

Table 3. Phytochemical Screening of Leaf Extract of *Murraya koenigii* (Curry)

S.No	Phytochemical constituent	Aqueous	Methanolic
1	ALKALOID	-	+
2	TANNIN	+	-
3	TERPENOID	+	+
4	PHENOL	+	+
5	CARBOHYDRATE	+	-
6	FLAVONOID	+	-
7	PROTEIN	+	+

Present(+), Absent(-)

The FTIR spectrum was used to identify the functional group of the active component present in extract based on the peak's values in the region of IR radiation.

In an infrared spectrum, the region 1500- 4000 cm^{-1} is useful for determination of functional groups.

In aqueous extract of Tulsi the FTIR peaks at 1636.09 cm^{-1} showed the presence of C=C (*Alkene*) group and at 3259.91 cm^{-1} showed the presence of the O-H group.

In aqueous extract of neem, the FTIR peaks at 1636.10 cm^{-1} showed the presence of C=C (*Alkene*) group and at 3262.72 cm^{-1} showed the presence of the O-H group.

In aqueous extract of curry, the FTIR peaks at 1635.98 cm^{-1} showed the presence of C=C (*Alkene*) group and at 3261.10 cm^{-1} showed the presence of the O-H group.

In Tulsi methanolic extract the FTIR peak at 1448.94 cm^{-1} showed the presence of C=C (*Alkene*), 2831.53 cm^{-1} indicate the presence of CH_3 (*Alkane*), 3315.66 cm^{-1} indicate the presence of the -OH group.

In Neem methanolic extract the FTIR peak at 1448.91 cm^{-1} showed the presence of C=C (*Alkene*), 2831.39 cm^{-1} indicate the presence of CH_3 (*Alkane*), 3314.56 cm^{-1} indicate the presence of the -OH group.

In curry methanolic extract, the FTIR peak is at 1448.89 cm^{-1} showed the presence of C=C (*Alkene*), 2831.77 cm^{-1} indicate the presence of CH_3 (*Alkane*), 3313.21 cm^{-1} indicate the presence of the -OH group.

Total phenol determination is determined by Folin ciocalteu reagent method (Mc Donald. et.al., 2001) with some modification and the calculation as follow:

Table 4. Total phenol determination

Plants extract in ml+0.1 ml ciocalteu reagent +5ml Na_2CO_3	Absorbance at 760nm with uv	Total phenolic content in 1ml of extract was calculated in mg/g
TULSI	0.857	167.8
NEEM	0.636	123.6
CURRY	0.362	68.8

Conclusion :

The current research work showed that the leaves of Tulsi, Neem, and curry is the main source of water constituents like alkaloid, flavonoid, terpenoid, phenol, carbohydrate and protein. Due to the presence of various bioactive compounds in the Tulsi, neem and curry leaves are more beneficial to us. Tulsi, neem, curry is an herbal medicine as compared to chemically synthesized drugs. They are used in traditional medicine as well as they have various therapeutic properties.

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