INTRODUCTION

The World Health Organization uncovered that 80% of world population relies on plant metabolites for their restorative worth in different wellbeing parts [1]. Different examinations on metabolites from plant sources brought about potential medications by mixes and taken an exponential development as far as common root and lesser reactions [2-4]. Tagetes erecta Linn. (Marigold) phytoconstituents are accounted for to be very powerful against kidney incoherences, solid agony, ulcers and wounds [5] and stomach ulcer, diabetes and fever expand lactation in moms, spennatorrhea [6]. Gymnem asylvestere has been turned out to be very powerful hostile to diabetic, mitigating, against microbial, hepatoprotective, and against hyperlipidemic plants [7,8]. Napoleonaimperialis a woody plant is utilized as pain relieving, tonic, antussive, antiasthmatic, etc. [9]. It is to some degree dissolveable in water and is weakly key (pKa3.5) in nature. Post oral association, it is immediately acclimatized from gastrointestinal tract and has a level out bioavailability of around 60% in individuals [10]. Recent research demonstrate that the flavonoids (bioactive auxiliary metabolite) are very compelling cancer prevention agents [11] with lower danger than butylated hydroxyanisole and butylated hydroxytoluene (manufactured antioxidants), and they are known as “response modifier” [12], mitigating [13], hostile to microbial [14,15]. Carthamus tinctorius bloom (carthamin) is powerful on circulatory[16] and has a level out bioavailability of around 60% in individuals [10].

As like liquor, phenolic mixes have novel properties and are far-reaching among the plant kingdom and key for self-guarding from pathogen [27]. The plant has proficiency against microbial development and the subjective phytochemical screening additionally uncovered that the plant is rich wellspring of auxiliary metabolites [30].

METHODS

A. nilagirica (Clarke) Pamp. leaves were gathered, isolated (new and solid), air-dried, powdered and put away in a sealed shut holder for quantitative examination of bioactive mixes. The dried powdered leaf tests were subjected to different estimations, for example, alkaloids, saponins, tannins, flavonoids, terpenoids, coumarin, amino acids, fatty acids, flavonoids, phenols, and steroids according to standard techniques [21] (Table 1).

RESULTS

In the earlier study [22], the phytochemicals of the A. nilagirica (Clarke) Pamp was subjected to subjective studies and the present examination was centered around the quantitative examination of the enrolled phytochemicals. The ethanolic leaf board of chose in the most dumbfounding measure of move in flavonoids and flavonoids and minimum yield are accessible in amino acids. The leaf concentrate was subjected to quantitative estimation, and the result is ordered.

DISCUSSION

In this study, alkaloid focus in the leaf concentrate of 4.33 mg which was demonstrated by the nearness of ruddy cocoa shading [23] and they are effective as cell reinforcements, antibacterial, antifungal, and antiviral [24]. The alkaloids are utilized as solutions (e.g.) cymaline as arrhythmic vincamine as antitumor, cocaine as sedative medications [25]. It has been accounted for that alkaloids secluded from the bases of Polyalthia longifolia var. pendula indicated antimicrobial action [26]. Terpenes are substantial and shifted class of natural mixes which incorporates every one of the assortments saps, and they frame the vital oils and utilized as normal added substances for nourishment [27,28]. The other essential auxiliary metabolites are coumarin (1.33 mg) and has ended up being exceptionally powerful nutraceutical [29] and the leaf concentrate of T. erecta Linn. enlisted 2.55 mg [25].

As like liquor, phenolic mixes have novel properties and are far-reaching among the plant kingdom and key for self-guarding from pathogen [27]. The plant has proficiency against microbial development and the subjective phytochemical screening additionally uncovered that the plant is rich wellspring of auxiliary metabolites [30].
recent three decades, the plant-based phenolic mixes (e.g. berry tea, bean) were utilized as a part of medication plan for stroke, diabetes, Alzheimer's infection and so forth [31]. The aggregate flavonoids were higher in the blossom than leaf remove in T. erecta Linn. [32] at various focuses. The present day approved doctors demonstrated that the flavonoids are proficient in curing numerous infections and have change the metabolic boost through neurotransmitters [33], and they are exceedingly cell reinforcement operator [34] and expand the intracellular level of vitamin [35].

**CONCLUSION**

This study with A. nilagirica (Clarke) Pamp uncovered that the plant has a high helpful quality as far as an assortment of phytochemicals from leaf remove and had let to a sure level toward extraction and filtration of specific bioactive mixes for human aliment.

**REFERENCES**

1. Prianka D, Shalini T, Navneet VK. A brief study on marigold (Tagetes species). A review Int Pharm 2013;4(1):43-8.
2. Vijay KP, Laxman BC, Rajashri S, Nikam B, Yuvaraj R, Janardhan PM. Pharmacognostic, physicochemical and phytochemical investigation of Tagetes erecta Linn. J Bio Sci Opinion 2003;1(1):21-4.
3. Erdogru OT. Antibacterial activities of some plant extracts used in folk medicine. Pharm Biol 2002;40(4):269-73.
4. Gutiérrez RH, Luba HH, Garrido SH. Antioxidant activity of Tagetes erecta essential oil. Antioxidant activity of Tagetes erecta essential oil. J Chil Chem Soc 2006;51(2):883-6.
5. Opara IC. A preliminary investigation to the antiemic properties of the leaf extract of Ocimum gratissimum. Phytother Res 1999;22:1692-4.
6. Nagat M, Baska E, Lawrence R, Saami M. Phytochemical screening, antioxidant and antibacterial activity of active compounds from Hemidermus indicus. Int J Curr Pharm Res 2016;8(2):24-7.
7. Odo GN. A preliminary pharmacological investigation in to the antispasmodic properties of the aqueous root extract of Napoleonia imperialis A.B. Pharm Res 1984;3(4):838-42.
8. Bashir S, Gialani AH. Studies on the antioxidant and analgesic activities of Aztec marigold (Tagetes erecta) flowers. Phytother Res 2008;22(12):1692-4.
9. Raja RV, Ramanathan T, Savitha V. Studies on wound healing property of coastal. Med Plants 2009;1(1):39-44.
10. Raju KN, Sunitha T, Babu IS. Quantitative estimation of riluzole in Aloe vera leaf remove and had let to a sure level toward extraction and filtration. Int J Pharm Biol 2006;32(3):4-5.
11. Bekkarine SS, Heinenon IM, Hopia AI. Flavonoids quercetin, myricetin, kaemferol and (+) catechin as antioxidants in methyl linoleate. J Sci Food Agric 1999;79(4):499-506.
12. Cusimhe TP, Lamb AJ. Antimicrobial activity of flavonoids. Int J Antimicrob Agents 2005;26(5):343-56.
13. Cushnie TP, Lamb AJ. Recent advances in understanding the antibacterial properties of flavonoids. Int J Antimicrob Agents 2011;38(2):99-107.
14. de Sousa RR, Queiroz KC, Souza AC, Gurgueira SA, Augusto AC, Miranda CA, et al. Phosphoprotein levels, MAPK activities and NFκappB expression are affected by fisetin. J Enzyme Inhib Med Chem 2007;22(4):439-44.
15. Galetti F, Baarile E, Curi P, Dolei M, Lanzotti V. Flavonoids from carnation (Dianthus caryophyllus) and their antifungal activity. Phytochem Lett 2008;1(1):44-8.
16. Kazuma K, Takahashi T, Sato K, Takeuchi H, Matsumoto T, Okuno T. Quinocochalones and flavonoids from fresh flaxers in different curiaceae of Carthamus tinctorius L. Biosci Biotechnol Biochem 2000;64(8):1588-99.
17. Kizil S, Cakmak O, Kirci S, Inan M. A comprehensive study on safflower (Carthamus tinctorius L.) in semi-arid condition. Biotechnol Biocatal Equip 2009;40:947-53.
18. Lee YS, Choe CW, Kim JJ, Ganapathi A, Udayakumar K, Kim SC. Determination of mineral content in methanolic safflower (Carthamus tinctorius L.) Seed extract and its effect on osteoblast markers. Int J Mol Sci 2010;11(1):292-305.
19. Weber LW, Boll MJ, Stumpf A. Hepatotoxicity and mechanism of action of halothane: Carbon tetrachloride as a toxicological model. Crit Rev Toxicol 2003;33(2):105-36.
20. Jun MS, Ha YM, Kim HS, Jang HJ, Kim YM, Lee YS, et al. Anti-inflammatory action of methanol extract of Carthamus tinctorius involves in heme oxygenase-1 induction. J Ethnopharmacol 2011;133(2):524-30.
21. Giancaspro GI. Dietary supplements. Bot Pharm Forum 2013;27(2):2255-8.
22. Parameswari P, Devika R. Qualitative screening of bioactive compounds from Ocimum basilicum Linn. Int J Pharm Pharm Sci 2012;4(1):519-21.
23. Tariq AL, Rayaz AL. Quantitative phytochemical analysis of traditionally used medicinal plant Terminalia chebula. Int J Res Biotechnol 2013;1(6):101-5.
24. Singh R, Jasrai YT. Mimusosa hamate (wild) a plant with antipathogenic properties. Int J Med Aromat-Plants 2012;2(4):677-83.
25. Devika R, Kolipillai J. An overview on plant secondary metabolites: Its medicinal importance. J Pharm Res 2012;5(2):984-6.
26. Kavita SM, Rasika CT, Swati D, Nirmala RD, Rajashree VK. Preliminary phytochemical analysis of Polygonia longifolia seeds. Int J Pharm Pharm Sci 2012;4(1):450-1.
27. Devika R, Kolipillai J. Quantitative analysis of bioactive compounds from Ficus carica (L.) flowers. Phytother Res 2015;29(6):839-45.
28. Winkel-Shirley B. Flavonoid biosynthesis. A colorful model for genetics, biochemistry, cell biology, and biotechnology. Plant Physiol 2001;126(2):485-93.
29. Di Carlo G, Mascolo N, Izzo AA, Capasso F. Flavonoids: Old and new aspects of a class of natural therapeutic drugs. Life Sci 1999;65(9):337-53.
30. Rao ML, Savithramma N. Quantification of primary and secondary metabolites of Svensonia hydrobaidensis - A rare medicinal plant. Int J Pharm Pharm Sci 2012;4(1):519-21.
31. Apil F, Ahmad I, Mehmood Z. Antioxidant and free radical scavenging properties of twelve traditionally used Indian medicinal plants. Turk J Biol 2000;24(3):177-83.
32. Devika R, Kolipillai J. In vitro quantification study of flavonoids from Tagetes erecta. Asian J Pharm Clin Res 2013;21(1):4-7.
33. Ravindra Bis. The biochemistry and medical significance of the flavonoids. Pharmacol Ther 2002;96(2-3):67-202.
34. Miller JM, Bohmt BA. Flavonal and dihydroflavonal glycosides of Echinocereus triglochidiatus var. Gueneyi. Phytochemistry 1982;21(4):951-2.
35. Spedding G, Ratty A, Middleton E Jr. Inhibition of reverse transcriptases by flavonoids. Antiviral Res 1989;12(2):99-110.

| S. No. | Phytochemicals | Amount/g of extract |
|-------|----------------|---------------------|
| 1.    | Alkaloid       | 4.33 mg             |
| 2.    | Saponins       | 1.22 mg             |
| 3.    | Tannins        | 12.4 mg             |
| 4.    | Glycosoids     | 24.3 mg             |
| 5.    | Terpenoids     | 10.2 mg             |
| 6.    | Coumarin       | 1.33 mg             |
| 7.    | Amino acids    | 1.33 mg             |
| 8.    | Fatty acids    | 12.2 mg             |
| 9.    | Flavonoids     | 17.2 mg             |
| 10.   | Phenols        | 10.2 mg             |
| 11.   | Steroids       | In traces           |

Table 1: Quantification of secondary metabolites