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INDIAN MEDICINAL PLANTS WITH DIURETIC ACTIVITY

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ABSTRACT

Every human being in the world has the right to afford medicines. While 80% of the world population is completely relying on herbal medicine. Since the population and cost of living is increasing day by day there is a demand in the existing population for herbal medicine. Researchers are contributing their work by finding new entities for new diseases emerging in the world. Scientist and Researchers are searching for natural resources for treating these diseases. But when side effects are concerned, they cannot be reduced but they can be controlled with traditional herbal medicine, complementary alternative medicine. Diuretics are agents which promote the formation of urine. Although diuretics are first line drugs which provide relief from cardiac failure, edema and hypertension with severe side effects. These plants can be used with efficacy and safety without producing any serious side effects. The plants reviewed in this article include an overview of the plant part used, type of extract and their activity that are essential for understanding diuretic action. In this article we have reviewed on plants used in the treatment of diuretics, the plants reviewed in this article are reported with diuretic activity. These plants can be explored and reviewed further in future which may have different activities for different diseases. This review gives the importance of herbal medicine used as diuretics these herbs can be used safely on humans.

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INTRODUCTION

The kidneys are bean shaped paired organs. The kidney is separated into three main regions, the renal cortex or peripheral cortex, the inner medulla or renal medulla and the renal pelvis. Diuretics are drugs that alter renal function. They manage cardiovascular and renal diseases. The kidneys play a major role through which drugs and their metabolites are eliminated by the body. Diuretics are drugs that increase the excretion of water and sodium ions. The main function of the kidney is to maintain the body's internal environment by excreting waste products, regulating the body temperature, maintaining fluid volume, electrolyte balance in the body and pH. The intake and removal of sodium must be equally balanced otherwise it may lead to serious complications like reduced output of blood from the heart or renal failure may occur.

The glomerular filtration starts at the Bowman's capsule. Approximately 70% of sodium reabsorption occurs in the proximal tubule. The function of the proximal convoluted tubule is passive reabsorption of water and active reabsorption of sodium. The Loop of Henle consists of a thin descending limb and thick ascending limb. The function of loop of henle is passive diffusion of water and active reabsorption of sodium. Sodium is reabsorbed in the thick ascending limb. Water is excreted out from the descending limb. In the thick ascending limb the reabsorption of salt takes place which is not balanced with the reabsorption of water. It enters the distal convoluted tubule, sodium reabsorption takes place in the distal convoluted tubule. Distal convoluted tubule empties into the collecting duct. Collecting tubules reabsorb sodium and secrete potassium.

Various classes of diuretics:

Loop Diuretics

The Loop Diuretics eg, Furosemide and Bumetanide, they excrete approximately 15-20% of filtered sodium. They increase the sodium in the nephron, causing loss of H^+ and K^+ . They decrease the excretion of uric acid and increase excretion of Ca^{2+} and Mg^{2+} .

Thiazide Diuretics

Diuretics acting on the Distal Convoluted Tubule include Thiazides. Eg. Hydrochlorothiazide, they are less potent than loop diuretics and are used in treating hypertension.

Aldosterone antagonist

Aldosterone antagonist eg, Spironolactone, they have limited diuretic action. They can be used in the treatment of heart failure and used in the treatment of hypertension when they are used in combination with loop diuretics or thiazides. Triamterene and Amiloride, they also have limited diuretic effect because a small fraction of sodium reabsorption occurs. They can be combined and given with loop diuretics and thiazide diuretics to maintain K^+ balance.

Carbonic Anhydrase Inhibitors

Carbonic Anhydrase Inhibitors eg, Acetazolamide, they are agents used in the treatment of glaucoma. They can increase the flow of alkaline urine and increase the excretion of sodium, potassium and water.

Osmotic Diuretics eg mannitol, the function of osmotic diuretics is to increase water and sodium excretion. They can be used in the treatment of acute renal failure.

The role of herbal medicine in diuretics

Herbal or natural diuretics play a major role in treating kidney related diseases. Diuretics or water pills are much stronger and more effective than the natural herbs, but the risk of side effects is much greater because of using these diuretic drugs.

Uses of Diuretics

Natural diuretics are not effective as synthetic diuretics, they can be used for, lowering high blood pressure, edema, congestive heart failure and liver cirrhosis. These drugs can also be used for treating kidney disorders such as kidney stones. There are many natural herbs and foods which increase sodium excretion and urination, thereby reducing water retention and lowering blood pressure. However, when it comes to natural diuretics they are weaker than water pills, but herbs are slightly more effective than the foods. The efficacy and safety are more with herbals when compared to diuretic drugs.

Common Side Effects of Diuretics

The frequently occurring side effects by using diuretics drugs are headache, nausea, dizziness, loss of appetite, gout, rheumatoid arthritis and joint pain may occur in severe cases. Electrolyte imbalance in the body which leads to low sodium level in the blood, it may also lead to dehydration and frequent urination, it causes hormonal imbalance in the body, it may produce menstrual irregularities in women, they may increase cholesterol levels and blood sugar levels, kidney damage and they may produce skin rashes.

Consuming foods with natural diuretics may reduce the risk of side effects in people with hypertension, renal failure and cardiac failure. Herbal diuretics can be used in case of patients suffering with kidney related disorder like acute renal failure and these diuretic herbs can produce little effect compared to herbal foods. Maintaining blood pressure to reduce hypertension and maintaining electrolyte balance and levels in the body may alter the level of side effects in the body. These plants can be effective in the treatment of kidney related diseases. These plants may produce fewer side effects when compared to diuretic drugs.

The Plants reported in this review with Biological Source, Family Name, Common Name, Plant Part Used and their activities.

***Abelmoschus esculentus* linn Malvaceae Ladies finger**

Plant part used: Fruits

The diuretic potential of decoctions of three plants *capsicum frutescens* linn, *Corchorus olitorius* linn and *abelmoschus esculentus* was reported using Furosemide as standard. [1]

***Abelmoschus moschatus* Malvaceae Musk mallow**

Plant part used: seed

The diuretic activity of Petroleum ether, Chloroform, Alcohol extract of *Abelmoschus moschatus* medikus was studied and the activity was compared with furosemide as standard. [2] Antiuro lithiatic activity of *Abelmoschus moschatus* seed extracts against zinc disc implantation-induced urolithiasis in rats was reported. [3]

***Abrus precatorius* linn Fabaceae Indian liquorice**

Plant part used: Seeds, Roots and Leaves

Diuretic Activity of *Abrus precatorius* seed extract was studied by Alcohol Induced Renal Damage in rats. [4]

***Abutilon indicum* Linn Malvaceae**

Plant part used: Leaves

The diuretic effects of aqueous and ethanol extracts of *Abutilon indicum* Linn Leaves using an acute model in Wistar albino rats was investigated. [5]

***Acacia nilotica* Linn Mimosaceae Babul black babool**

Plant part used: Bark

Comparative study of *Acacia nilotica* and *Acacia sinuata* was reported for its diuretic activity in rats. [6]

***Acacia sinuata* Lour Mimosaceae Soap nut acacia**

Plant part used: Pods

Comparative study of *Acacia sinuata* and *Acacia nilotica* for its diuretic activity was reported. [6]

***Acalypha indica* Linn Euphorbiaceae**

Diuretic activity was investigated with methanolic extract of *Acalypha indica* Linn. [7]

***Achyranthes aspera* linn Amaranthaceae Prickly chaff flower plant**

Plant part used: Whole plant

The methanolic extract of whole plant of *Achyranthes aspera* was investigated for its diuretic potential. The diuretic effect was found out by Lipschitz et al method using furosemide as standard drug. [8]

Diuretic activity of aqueous extract *Achyranthes aspera* was reported. [9]

Aqueous and alcoholic extracts of the leaf of *Achyranthes aspera* leaves were tested for diuretic activity in rats. [10]

***Acorus calamus* linn Araceae Sweet flag**

Plant part used: Rhizomes

The therapeutic efficacy of *Acorus calamus* on acetaminophen induced male albino rats for nephrotoxicity and oxidative stress was studied. [11]

Screening of *Achyranthus Aspera*, *Acorus Calamus*, and *Caesalpinia Crista* for Diuretic Activity was reported. [12]

***Alangium salvifolium* Linn Alanginaceae Sage leaved alangium**

Plant part used: Roots

Diuretic activity of *Alangium salvifolium* was investigated. [13]

***Albizia lebbek*, Fabaceae**

Plant part used: Leaves

The diuretic activity of methanolic extract of *albizia lebbek* was investigated in rats. [14]

***Allium sativum* Linn Liliaceae Garlic**

Plant part used: Bulbs

Diuretic Activity of Steroidal and Triterpenoid Saponin Fraction of *Allium sativum* Linn was reported. [15]

***Amaranthus spinosus* linn Amaranthaceae Prickly amaranth**

Plant part used: Whole plant

Diuretic Activity of aqueous extracts of *Amaranthus spinosus* in wistar rats was reported. [16]

***Amomum subatum* Roxb Zingiberaceae Cardamom**

Plant part used: Seeds

Large cardamom seeds with melon seeds are recommended as diuretic in case of gravel of the kidney and as an antidote for both snake and scorpion venom. [17]

***Anethum graveolens* linn Apiaceae Dill**

Plant part used: Root

A decoction of betel nut and 'khair' (khadira) taken with honey cures minor urinary affection. [18, 19]

***Artocarpus heterophyllus* lam Moraceae Jack fruit tree**

Plant part used: Seeds

Diuretic Activity of Hydroalcoholic Extract of *Artocarpus Heterophyllus* leaves was evaluated in rats. [20]

The diuretic activity of ethanolic extract of *Artocarpus heterophyllus* Seeds on acute administration was evaluated in rats. [21]

***Baliospermum montanum* willd Euphorbiaceae**

Plant part used: Roots

The diuretic effect of alcohol and aqueous extracts of roots of *Baliospermum montanum* was investigated in male wistar rats. [22]

***Basella alba*, Basellaceae Indian spinach**

Plant part used: Stems and leaves

The diuretic and antiurolithiatic activities of ethanolic leaf extract of *Basella alba* in Albino rats was undertaken. [23]

***Biophytum sensitivum* linn Oxalidaceae**

Plant part used: Whole plant

The diuretic activity of various extracts of whole plant of *Biophytum sensitivum* was evaluated in Wistar strain albino rats. [24]

Anti-urolithiatic activity of standardized extract of *Biophytum sensitivum* was evaluated against zinc disc implantation induced urolithiasis in rats. [25]

***Boerhaavia diffusa* linn Nyctaginaceae Hogweed**

Plant part used: Roots

The diuretic effect of aqueous extract of *Boerhaavia diffusa* roots was evaluated. [26]

***Brassica oleracea* Brassicaceae**

Plant part used: Leaves

Diuretic activities of both polar and non-polar extract of leaves of *Brassica oleracea* were investigated on malewhite rabbits and male Sprague-Dawley rats. [27]

***Buchanania lanzan* spreng Anacardiaceae**

Plant part used: Fruits

The diuretic potency of total alcoholic extracts and its polar and non polar fractions of Priyala fruits (*Buchanania angustifolia* and *Buchanania lanzan*) were attempted in rats. [28]

***Butea monosperma* lam Fabaceae Flame of the forest**

Plant part used: Flowers

Aqueous and alcoholic extracts of *Butea monosperma* Flowers were tested for its diuretic activity in rats. [29]

The effect of aqueous extracts of dried seeds powder of *Butea Monosperma* plant and *Nigella Sativa* plant against Ethylene glycol induced renal calculi in albino wistar rats has been studied in this research. [30]

***Camellia sinensis* L Theaceae**

Plant part used: Leaves

This study investigates the diuretic activity of black tea infusion (BTI) in rats. [31]

***Canthium parviflorum*, Rubiaceae Carray cheddie**

Plant part used: Roots and leaves

Aqueous and Ethanolic extract of leaves of *Canthium parviflorum* Lam. were evaluated for Wound Healing and Diuretic Activities. [32]

***Carissa edulis*, Apocynaceae**

Plant part used: Root Bark

The diuretic activity of different solvent fractions of 80% methanol extract of *Carissa edulis* root bark in normal wistar rats was investigated. [33]

***Cardiospermum halicacabum* linn Sapindaceae**

Plant part used: Roots

Diuretic activity of whole plant extracts of *Cardiospermum halicacabum* (linn) was evaluated. [34]***Carica papaya* linn Caricaceae Papaya**

Plant part used: Fruits and latex

Aqueous root extract of *Carica papaya* when given orally to rats produced significant increase in urine output and showed similar profiles of urinary electrolyte excretion to that of hydrochlorothiazide. [35]

The roots of Papaya tree possess diuretic property. [36]

***Carthamus tinctorius* linn Asteraceae Safflower**

Plant part used: Leaves

Ethnobotanical reports suggest almost similar effects and indicate its therapeutic application in kidney diseases such as chronic nephritis. [37]

***Cassia Sophera* linn Caesalpinaceae**

Plant part used: Seeds

The pharmacological evaluation of the diuretic activity and acute toxicity study of different extract of *Cassia sophera* Linn was reported in laboratory rats. [38]***Cassia occidentalis*, Caesalpinaceae Stinking wood, Negro coffee**

Plant part used: Whole plant, roots and leaves

The diuretic and antioxidant properties of *Cassia occidentalis* leaves in aqueous extract were investigated. [39]The diuretic activity and acute toxicity of ethanolic extract of *Cassia occidentalis* was evaluated on wistar strain albino rats. [40]***Cayratia carnos*, Vitaceae, Fox grape**

Plant part used: Whole plant and oil

The diuretic activity of *Cayratia carnos* was investigated. [41]***Centella asiatica* Apiaceae Indian penny wort**

Plant part used: Whole plant

The diuretic effect of methanolic and ethanolic extracts of *Centella asiatica* in wistar rats was reported. [42]***Cichorium intybus* linn Asteraceae Chicory**

Plant part used: Roots

In the present study 70% ethanol extract of seed of *Cichorium intybus* was investigated for its protective and curative effects against gentamicin induced acute renal injury and also for the diuretic effect, in albino rats of either sex. [43]

Kidney Health: Chicory root extract is often used as a diuretic, which increases the amount of urination. Consistent and healthy frequency of urination can help to eliminate toxins that the body stores in the liver and kidneys, and preventing the dangerous conditions that can occur when toxins are allowed to remain in the body. Also, frequent urination can eliminate excess water weight, and even reduce fat, since 4% of urine is usually fat deposits that would otherwise be stored somewhere else in the body. [44]

***Cinnamomum tamala*, *Cinnamomum zeylanicum* Lauraceae Indian cassia**

Plant part used: Leaves

The diuretic potential of the leaves of *C. tamala* was evaluated. [45]The aqueous and ethanolic extracts of *Cinnamomum tamala* leaves were investigated for its diuretic activity tested in albino rats. [46]The diuretic activity of alcoholic extract of *Cinnamomum zeylanicum* in swiss albino rats was evaluated. [47]***Cissampelos Pareira* Menispermaceae**

Plant part used: Roots

The diuretic activity of ethanolic extract of leaves of *Cissampelos pareira* was evaluated by Lipschitz method in albino rats. [48]***Citrus medica* linn Rutaceae Citron**

Plant part used: Whole plant and Roots

The Effect of *Citrus medica* in urolithiasis induced by Ethylene Glycol model was studied. [49]***Citrus reticulata* Rutaceae Loose skinned orange**

Plant part used: Flowers

The study was designed to evaluate the diuretic potential of Lemon Juice. [50]

***Clitoria ternatea* linn Fabaceae Clitoria**

Plant part used: Roots

Diuretic activity of roots of *Clitoria ternatea* L. was evaluated in dogs. [51]***Cocculus hirsutus* linn Minispermaceae Broom creeper**

Plant part used: Roots

The aqueous extract of aerial parts of *Cocculus hirsutus* showed significant diuretic activity and laxative effect in rats. [52]***Cocos nucifera* Arecaceae Coconut**

Plant part used: Juice

The diuretic properties of aqueous and alcoholic extract of *Cocos nucifera* husk were evaluated by determination of urine volume, electrolyte concentration and diuretic potency in male albino rats. [53]

To rationalize the diuretic activity of APM and BPM in experimental rats. The diuretic properties of APM and BPM were evaluated by determination of urine volume, electrolyte concentration and diuretic potency in male albino rats. [54]

***Colocasia esculenta* Linn Araceae**

Plant part used: Leaves

The effect of aqueous extract of CE leaves was evaluated for antihypertensive and acute diuretic activity in rats. [55]

The effect of ethanol extract of CE leaves was evaluated for antihypertensive and diuretic activity in rats. [56]

***Coriandrum sativum* linn Apiaceae Coriander**

Plant part used: Fruits

The acute diuretic activity of continuous intravenous infusion of an aqueous extract of the seed of *Coriandrum sativum* L. was reported in rats. [57]

This study was designed to rationalize its use in dyspepsia, abdominal colic, diarrhea, hypertension and as diuretic. [58]

***Crataeva nurvala* Capparaceae Three leaved caper**

Plant part used: Bark and leaves

An aqueous and ethanolic extract of leaves of *Crataeva nurvala* were evaluated for diuretic activity and the activity was compared with furosemide as standard. [59]Nephroprotective activity of ethanolic extract of stem barks of *Crataeva nurvala* Buch Ham was reported. [60]***Crocus sativus* linn Iridaceae Saffron**

Plant part used: Dried stigma

The diuretic activity of aqueous extract of dried saffron (stigma of *Crocus sativus*) in rat was evaluated. [61]

A protective effect of the aqueous extract of crocus sativus against ethylene glycol induced nephrolithiasis in rats was reported. [62]

The diuretic effect of crocine which is the pharmacologically active component of *Crocus sativus* L (saffron) and to study the possible mechanism of action in relation to urinary nitrite. [63]***Cucumis melo* Cucurbitaceae Snake cucumber**

Plant part used: Seeds

The diuretic effect of ethanolic seed extracts of *Macrotyloma uniflorum* and *Cucumis melo* in Albino rats was undertaken. [64]The nephroprotective activity of methanolic extract of *Cucumis melo* seed kernel in gentamicin-induced nephrotoxicity was carried out. [65]***Cucumis sativus* Cucurbitaceae Common cucumber**Plant part used: Seeds The diuretic effect of ethanol extract of the leaves of *Trichosanthes Cucurmena* L., *Cucumis sativus* L. and fruits of *Corriandrum sativum* L. to make a poly herbal formulation (PHF) and were administered to experimental rats. [66]***Cucurbita maxima* Cucurbitaceae Squash, melon**

Plant part used: Fruits and seeds

The physico-chemical nature and diuretic activity was evaluated to establish the purity and diuretic activity by comparing with the standard acetazolamide. [67]

***Cucurbita maxima* Cucurbitaceae Squash, melon**

Plant part used: Seeds

The antidiuretic activity of extracts of *cucurbita maxima* Duchesne was evaluated in Rats. [68]***Cuscuta reflexa* Roxb Convolvulaceae Dodder**

Plant part used: Whole plant

Aqueous and alcoholic extract of *Cuscuta reflexa* and *Cassytha filiformis* were investigated for diuretic activity in Wister rats. [69]

***Cyclea peltata* Menispermaceae Pata root**

Plant part used: Roots and leaves

The comparative diuretic potential of methanolic root extracts of *Cissampelos pareira*, *Cyclea peltata* and *Stephania japonica* in saline primed normal rats after oral administration were evaluated. [70, 71]

***Cymbopogon martinii* Poaceae Rusa grass**

Plant part used: Whole plant

To assess the diuretic activity of infusions prepared from *Cymbopogon citrates* leaves in healthy volunteers was reported. [72]

***Cynodon dactylon* linn Poaceae Dhubgrass**

Plant part used: Whole plant

The diuretic activity of aqueous extract of *Cynodon dactylon* was carried out. [73]

The diuretic potential and effect on urinary electrolytes of aqueous *Erica multiflora* L. flowers and *Cynodon dactylon* L. rhizomes extracts in rats was evaluated. [74]

***Daucus carota* linn Apiaceae Carrot**

Plant part used: Roots and seeds

Urinary, kidneys and water retention as an excellent diuretic, antilithic and antiseptic, wild carrot is widely used as a urinary system tonic, for stones in the bladder and kidneys, urinary tract infections, water retention, gout and rheumatism. [75]

***Dendrophthoe falcata* Loranthaceae Mistletoe**

Plant part used: Whole plant

The comparative effect of NR-AG-I and NR-AG-II (polyherbal formulations) for diuretic activity on healthy albino rats was studied. [76]

Diuretic and antilithiatic activity of *Dendrophthoe falcate* was reported. [77]

***Desmostachya bipinnata* Poaceae Sacrificial grass**

Plant part used: Whole plant and roots

The pharmacological study was carried out to evaluate the diuretic and laxative activity of its hydro-alcoholic extract in rats. [78]

***Dioscorea alata* linn Dioscoreaceae Greater yam**

Plant part used: Tubers

Enrich the kidney, and diuretic. [79]

***Diospyros malabarica* Ebenaceae Indian persimon**

Plant part used: Leaves

The antiurolithiatic activity of ethanolic extract of fruits of *Diospyros Malabarica* (Desr) Kostel on rats in ethylene glycol (EG) and Ammonium chloride (AC) induced urolithiasis model was investigated. [80]

***Elephantopus scaber* linn Asteraceae Prickly leaved elephants foot**

Plant part used: Whole plant

Single oral dose of ethanolic leaf extract of *Elephantopus scaber* Linn. Leaves were studied for its nephroprotective effect on albino rats. [81]

***Elettaria cardamomum* Zingiberaceae Cardamom**

Plant part used: Seeds

The aqueous suspension of the formulation was studied for its possible diuretic activity and its effect on urinary sodium and potassium excretion. [82]

***Eleusine coracana* linn Poaceae Ragi**

Plant part used: Grains

The ethanolic and aqueous extracts of grains of *E. coracana* were tested for diuretic activity. [83]

***Embelia ribes* Burm Myrsinaceae Embelia**

Plant part used: Fruits

The nephroprotective and anti-polyuric role of embelin on lithium induced nephrogenic diabetes insipidus (NDI) in albino rats was evaluated. [84]

***Erythrina variegata* Linn Fabaceae Indian coral tree**

Plant part used: Bark

The chloroform and ethanol extract of *Erythrina variegata* was evaluated for the diuretic activity. [85]

***Eucalyptus globus* Myrtaceae Blue gum**

Plant part used: Eucalypt oil

An emulsion made by shaking up equal parts of the oil and powdered gum-arabic with water has been used as a urethral injection. [86]

***Euphorbia thymifolia* Linn Euphorbiaceae**

Plant part used: Whole plant

Crude ethanolic extract and fractions of *Euphorbia Thymifolia* linn was investigated for diuretic and laxative activity in albino rats. [87]

***Euphorbia hirta* Euphorbiaceae**

Plant part used: Whole plant

Evaluation of the diuretic activity on *Euphorbia hirta* in rats was studied. [88]

***Ferula asafoetida* Linn Apiaceae Asafoetida**

Plant part used: Root, oleoresin

Extract of *Ferula foetida* regelreverses gentamicin induced nephrotoxicity in rats was investigated. [89]

The diuretic effect of asafoetida in normal rats was undertaken. [90]

***Flacourtia indica* Flacourtiaceae Governor's plum**

Plant part used: Roots

The diuretic activity of the ethanolic extract of roots of *Flacourtia indica* was carried out. [91]

***Foeniculum vulgare* Mill Apiaceae Fennel**

Plant part used: Fruits

Diuretic activity of plants used for the treatment of urinary ailments in Guatemala. [92]

The renoprotective effect of the aqueous extract of *Foeniculum vulgare* (AEF) in experimental PCOS female rats was studied. [93]

***Gentiana oliveri* Gentianaceae Indian gentian**

Plant part used: Rhizomes

Extracts of *Gentiana oliveri* and gentianine were evaluated for diuretic activity in normotensive, rats. [94]

***Glycyrrhiza glabra* linn Fabaceae Liquorice**

Plant part used: Roots

The diuretic activity of *glycyrrhiza glabra* linn in experimental animals was evaluated. [95]

***Gmelina arborea* Roxb Verbanaceae Comb teak**

Plant part used: Whole plant

The diuretic activity of different fruit extracts of the plant *G. arborea* using ethanol, ethyl acetate, n-butanol and petroleum ether as solvents was attempted. [96]

The diuretic effect of methanol extract of the *Gmelin arborea* (MEGA) was investigated in albino rats. [97]

***Gossypium herbaceum* Linn Malvaceae Indian cotton**

Plant part used: Roots

The diuretic activity of ethyl acetate and alcohol extract of *Gossypium herbaceum* Linn leaves was investigated in male wistar albino rats. [98]

***Haldina cordifolia* Rubiaceae Haldu**

Plant part used: Roots and barks

Bark used on the urinary problem Bark is used on burning sensation of urine. [99]

***Hedyotis corymbosa* Rubiaceae**

Plant part used: Whole plant

The ethanolic extract of *Hedyotis corymbosa* showed significant effect on uterine contraction, this was observed in the isolated uterine horn preparation of virgin female Sprague Dawley rat. [100]

***Helianthus annuus* Linn Asteraceae Common sunflower**

Plant part used: Seeds

The effect of aqueous and ethanolic extracts of *Helianthus annuus* Linn. (Sunflower) leaves on calcium oxalate nephrolithiasis has been studied in male Albino Wistar rats. [101]

***Heliotropium indicum* Linn Boraginaceae Indian turnsole**

Plant part used: Whole plant

The plant decoction is considered as diuretic and remedy for the treatment of kidney stone. [102]

***Hordeum vulgare* Linn Poaceae Barley**

Plant part used: seeds

The antiurolithiatic and antioxidant activity of ethanolic extract of *Hordeum vulgare* seeds (EHV) was investigated on ethylene glycol-induced urolithiasis in Wistar albino rats. [103]

***Hygrophila auriculata* Acanthaceae Long leaved barleria**

Plant part used: Roots

The diuretic property of the seeds of *Hygrophila auriculata* (Schum) in normal Wistar Albino rats was investigated. [104]

The diuretic effect of whole plant extracts and its fractions was conducted. [105]

***Ichnocarpus frutescens* Linn Apocynaceae**

Plant part used: Roots

The anti-Urolithiatic effect of ethyl acetate root extract was performed in nephrolithiasis induced rats by feeding with ethylene glycol water. [106]

***Indigofera tinctoria* Linn Fabaceae Indian indigo**

Plant part used: Whole plant

The Avuri kudineer Decoction of *Indigofera tinctoria* made of indigo leaves AKL, the Avuri kudineer made of indigo root and leaves AKRL was evaluated for nephroprotective activity in Cisplatin induced renal damage in rats. [107]

***Ipomoea batatas* Linn Convolvulaceae Sweet potato**

Plant part used: Roots

The diuretic activity of aqueous extract of *Ipomoea batatas* the phytochemical analysis of aqueous extract of *Ipomoea batatas* root was examined. [108]

***Jasminum auriculatum* Oleaceae Needle flower jasmine**

Plant part used: Roots and flowers

Alcoholic and aqueous extracts of flowers were investigated for its diuretic activity in albino rats. [109]

***Kaempferia galanga* Linn Zingiberaceae**

Plant part used: Roots and rhizomes

The diuretic activity of the petroleum ether extract of *Kaempferia galanga* Linn in animal models using Lipschitz method was performed. [110]

***Kyllinga nemoralis* Cyperaceae**

Plant part used: Tubers

The diuretic activity of ethanol and petroleum ether extract of this species was evaluated. [111]

***Lagenaria siceraria* Cucurbitaceae Bitter bottle gourd**

Plant part used: Seeds

Vacuum dried juice extract and methanol extract of the fruits of *Lagenaria siceraria* Mol. have been evaluated for its diuretic activity in albino rats. [112]

The effect of aqueous extract of seeds of *Lagenaria siceraria* (AELSS) was seen on urine volume and electrolytes in swiss albino rats was compared with standard drug Hydrochlorothiazide. [113]

***Lawsonia inermis* Linn Lythraceae Henna**

Plant part used: Roots

The diuretic activity of aqueous and ethanolic extracts of *Lawsonia inermis* leaves was investigated in rats. [114]

***Lepidium sativum* Linn Cruciferae Garden cress**

Plant part used: Leaves

The diuretic effect of aqueous and methanol extracts of the dried seeds of *Lepidium sativum* was undertaken in normal rats. [115]

***Limonia acidissima* Linn Rutaceae Curd fruit**

Plant part used: Fruits

Diuretic activity of the extracts of *limonia acidissima* was evaluated in rats. [116]

***Macrotyloma uniflorum* Fabaceae Horse gram**

Plant part used: Seeds

The diuretic effect of ethanolic seed extracts of *Macrotyloma uniflorum* and *Cucumis melo* was undertaken in Albino rats. [117, 118]***Madhuca longifolia* Sapotaceae South Indian mahua**

Plant part used: Flowers

Diuretic activity was reported. [119]

***Melia azedarach* Linn Meliaceae Persian liliac**

Plant part used: Leaves

The anti-urolithiatic activity of the aqueous and alcoholic extracts of *Melia azedarach* Linn leaves was investigated in calcium oxalate urolithiasis in male albino rats. [120]Antilithiatic effect of on *Melia azedarach* was determined in ethylene glycol-induced nephrolithiasis in rats. [121]***Mentha viridis* Linn Labiatae**

Plant part used: Aerial Parts

The diuretic effect of the aqueous methanol extract of *Mentha viridis* Linn was evaluated in Albino rats. [122]***Merremia emarginata* Convolvulaceae**

Plant part used: Whole plant

In the Philippines, decoction of leaves and tops were used as diuretic. [123]

***Mesua nagassarium* Clusiaceae Iron wood tree**

Plant part used: Flowers

As Nagakesara is a mild diuretic, it is used as an adjunct in dysuria. [124,125]

***Michelia champaca* Linn Magnoliaceae Champak**

Plant part used: Whole plant

To ascertain the diuretic potential of the leaves and stem bark of *Michelia champaca* L. [126]***Mimosa pudica* Linn Mimosaceae Humble plant**

Plant part used: Roots

The diuretic activity of ethanolic root extract of *Mimosa pudica* in albino rats was evaluated. [127]The diuretic activity of different extracts of *Mimosa pudica* was evaluated using lipschitz test model. [128]***Moringa oleifera* Linn Moringaceae**

Plant part used: Roots

Diuretic activity of alcoholic extract of *Moringa oleifera* leaves in swiss albino rats compared with hydrochlorothiazide was evaluated. [129]***Moringa Stenopetala* Moringaceae**

Plant part used: Leaves

The effect of hydro-ethanolic extract of *M. stenopetala* leaves was evaluated using in-vivo mice model. [130]***Morus alba* linn Moraceae Mulberry**

Plant part used: Seeds

The effect of the ethanolic leaf extract of *Morus alba* L. was investigated against Calculi-Producing Diet induced nephrolithiasis in Wistar rats. [131]***Mucuna pruriens* linn Fabaceae Cowhage**

Plant part used: Roots

Anti-Inflammatory, Diuretic and Antibacterial Activities of Aerial Parts of *Mucuna pruriens* Linn was reported. [132]***Myristica fragrans* Myristicaceae Nutmeg**

Plant part used: Seeds

The effects of oral administration of nutmeg commonly used as spice in various dishes, as components of teas and soft drinks or mixed in milk and alcohol on the kidneys of adult Wistar rats were carefully studied. [133]

***Nardostachys jatamansi* Valerianaceae Musk root**

Plant part used: Rhizome

The In-vitro anti-oxidant and In-vivo diuretic activity of Ethyl acetate extract of *Nardostachys jatamansi* DC roots was investigated in rats. [134]

The diuretic activity of ethanolic and petroleum ether extracts of *Nardostachys jatamansi* DC roots was investigated in rats. [135]

The diuretic potential and effect on urinary electrolytes of aqueous rhizome was evaluated in normal albino rats. [136]

***Nelumbo nucifera* Nymphaeaceae Lotus**

Plant part used: Stem, root and leaves

Diuretic effect of Methanol extracts of the dried seeds of *Nelumbo nucifera* Gaertn was undertaken in normal rats. [137]

***Neolamarckia cadamba* Rubiaceae Kadam**

Plant part used: Bark

The efficacy of aqueous fruit extract of *Neolamarckia cadamba* on diuretic property was evaluated in albino rats. [138]

The various extracts of the barks of *Neolamarckia cadamba* were studied for its diuretic and laxative activity. [139]

***Nigella sativa* Linn Ranunculaceae Black cumin**

Plant part used: Seeds

The phenolic profile, antioxidant and diuretic effects of black cumin and lady-in-a-mist seeds were evaluated. [140]

***Nyctanthes arbor-tristis* linn Oleaceae Night jasmine**

Plant part used: Leaves

The diuretic activity of the water-soluble portions of the ethanolic extracts of its flowers, barks, seeds and leaves were done. [141]

***Ocimum basilicum* linn Lamiaceae Sweet basil**

Plant part used: Whole plant

The diuretic activity of aqueous extract of *Ocimum Sanctum* was attempted in healthy Wistar albino rats. [142]

***Oroxylum indicum* linn Bigoniaceae Indian trumpet tree**

Plant part used: Roots

The effect of chrysin isolated from *Oroxylum indicum* against cisplatin induced nephrotoxicity. Chrysin was isolated from dried roots of *Oroxylum indicum*. Nephroprotector activity was evaluated in male Albino rats. [143]

***Parmelia perlata* Parmeliaceae Stone flower**

Plant part used: Whole plant

The hydroalcoholic extract of P. Perlata showed significant in-vitro antiurolithiatic activity against APMH (Ammonium Magnesium Phosphate Hexahydrate) crystals of struvite stone in single diffusion gel growth technique. [144]

***Pedalium murex* linn Pedaliaceae**

Plant part used: Whole plant

Nephroprotective activity of ethanolic extract of dried fruits of *Pedalium murex* linn in cisplatin induced renal damage in rats was reported. [145]

Effect of fruits of *pedilum murex* against cadmium chloride-induced nephrotoxicity in rats was reported. [146]

Protective Effect of Fruits of *Pedalium Murex* against Gentamicin -Induced Nephrotoxicity in rats was reported. [147]

The ethanolic extract of *Pedalium murex* Linn fruits on experimental model of calcium oxalate nephrolithiasis was evaluated. [148]

***Phoenix dactylifera* linn Arcaceae Date palm**

Plant part used: Leaves and flowers

Nephroprotective Action of *Phoenix dactylifera* in gentamicin-induced nephrotoxicity was evaluated. [149]

Proanthocyanidin-rich date seed extract protects against chemically induced hepatorenal toxicity was evaluated. [150]

Antioxidant-rich date palm fruit extract inhibits oxidative stress and nephrotoxicity induced by dimethoate in rat was evaluated. [151]

***Phyla nodiflora* linn Verbenaceae Purple lippie**

Plant part used: aerial parts, whole plant

The diuretic potential of methanol and aqueous extracts of the aerial parts was assessed in albino rats using in-vivo Lipschitz test model. [152]

The ethanolic extract of whole plant of *Phyla nodiflora* Linn Greene was studied for its antiurolithiatic activity against most common type of renal stones i.e. calcium oxalate type. [153]

***Phyllanthus Acidus* Euphorbiaceae**

Plant part used: Leaves

Diuretic effect of ethanol extract of *P. acidus* leaves in female *Wistar* rats using modification of Lipschitz method was studied. [154]***Phyllanthus amarus* Euphorbiaceae**

Plant part used: Whole plant

Nephroprotective and cardioprotective effect of *Phyllanthus amarus* is evident from the study in which methanol extract of *Phyllanthus amarus* leaves were investigated. [155]The diuretic, hypotensive and hypoglycemic effects of *Phyllanthus amarus* on human subjects were assessed. [156]***Phyllanthus emblica* linn Euphorbiaceae Indian goose berry**

Plant part used: Hair

Reduced the elevated levels of serum creatinine and urea nitrogen; thiobarbituric acid-reactive substance levels of serum, renal homogenate was reported in aged rats. [157]

***Phyllanthus niruri* Linn Euphorbiaceae**

Plant part used: Whole plant

Aqueous extract of *Phyllanthus niruri* was tested for its diuretic activity and compared with the standard drug hydrochlorothiazide. [158]***Piper cubeba* linn Piperaceae Cubebs**

Plant part used: Berries

The diuretic activity of Kabab chini *Piper cubeba* was evaluated in albino rats. The powder of Kabab chini (*Piper cubeba*) was administered to the experimental rats. [159]***Plectranthus amboinicus* Lamiaceae Indian borage**

Plant part used: Leaves

The diuretic properties of ethanolic and aqueous extracts were evaluated by determination of urine volume and electrolyte concentration in male albino rats. [160]

***Polygonatum verticillatum* linn Liliaceae Mahameda**

Plant part used: Root stock

The rhizome of *P. verticillatum* was tested for its diuretic activity in male Albino rats. [161, 162]***Portulaca oleracea* linn Portulacaceae Common purslane**

Plant part used: Stem and leaves

The antiatherogenic, renal protective and immunomodulatory effect of Purslane on hypercholesterolemic rats was investigated. [163]

The Antirolithiasis activity of the ethanolic extract of aerial parts of *Portulaca oleracea* Linn was evaluated. [164, 165]***Pseudarthritis viscida* linn Fabaceae**

Plant part used: Roots

The ethanolic extracts prepared from aerial parts of *Pseudarthritis viscida* was studied for anti-inflammatory and diuretic activities in albino rats. [166]***Raphanus sativus* linn Brassicaceae Radish**

Plant part used: Roots

The diuretic activity of aqueous extract of *raphnus sativus* using albino wistar rats was evaluated. [167]

The Diuretic activity of this polyherbal formulation-Ural Syrup was investigated. [168]

***Ricinus communis* linn Euphorbiaceae Castor oil**

Plant part used: Oil

The diuretic study was conducted in *Wistar* Albino rats using Furosemide as the reference standard and with two doses (100 and 200mg/kg, p.o) of an ethanolic extract of *Ricinus communis* leaves (RCE) respectively. [169]***Rotula aquatic* lour Boraginaceae**

Plant part used: Roots

The Effect of the alcoholic extract of *Rotula Aquatic* against ethylene glycol-induced urolithiasis in albinorats was investigated. [170]***Saccharum spontaneum* linn Boraginaceae Wild Sugarcane**

Plant part used: Roots

The ethanolic extract of roots of *Saccharum spontaneum* Linn was evaluated for its antilithiatic activity in rats. [171, 172]

***Salvadora persica* linn Salvadoraceae Tooth brush tree**

Plant part used: Stem bark

The diuretic effect of methanolic extract of the dried leaves of *Salvadora persica* in normal rats was undertaken. [173]

***Santalum album* Santalaceae Sandal tree**

Plant part used: Heart wood

The diuretic activity was reported. [174]

***Sesbania grandiflora* Fabaceae Swamp pea sesban**

Plant part used: Fruits

The diuretic activity was screened for methanol and aqueous extracts of *Sesbania Grandiflora* flowers. [175]

***Sida spinosa* linn Malvaceae**

Plant part used: Root and stem

Aqueous and alcoholic extracts of *Sida spinosa* leaves were tested for diuretic activity in rats. [176]

***Solanum xanthocarpum* Solanaceae Poison berry**

Plant part used: Fruits and roots

The diuretic potential of *S. xanthocarpum* was scientifically evaluated. [177]

The effects of *Solanum xanthocarpum* fruit extract in ethylene-glycol-induced urolithiasis in the male Wistar rats were designed. [178]

Diuretic activity of aqueous extract of *Solanum xanthocarpum* leaves was evaluated in experimental animals. [179]

***Solanum nigrum* linn Solanaceae Black night shade**

Plant part used: Whole plant

The diuretic effect of chloroform and ethanol extracts of the leaf of *Solanum nigrum* in normal rats was investigated. [180]

***Solanum surattense* Solanaceae Yellow berried night shade**

Plant part used: Whole plant

Solanum Surattense plant was selected to investigate its Diuretic and Anti-inflammatory effect in experimental animal models. [181]

The diuretic effect of alcoholic (AlcE) and aqueous extracts (AqE) of whole plant of *Solanum surattense* Burm was undertaken in Wistar rats. [182]

The study was conducted for provision of pharmacological justification for folkloric uses of *Solanum surattense* in the treatment of dysuria. [183]

***Sphaeranthus indicus* linn Asteraceae East Indian globe thistle**

Plant part used: Whole plant [184]

Gentamicin induced acute renal failure in rats was reported. [185]

Effect of ethanol extract of *Sphaeranthus indicus* on cisplatin-induced nephrotoxicity was reported in rats. [186]

***Strychnos potatorum* Loganiaceae Clearing nut tree**

Plant part used: Seeds

Methanol extract of *Strychnos potatorum* Linn seeds was evaluated for its diuretic activity in Wistar albino rats. [187]

***Syzygium cumini* linn Myrtaceae Black plum**

Plant part used: Leaves

This study briefly focuses on the evaluation of diuretic activity and its possible mechanism of action of methanolic extract of *Syzygium cumini* seeds. [188]

The diuretic activity of different extracts of bark of *Syzygium cumini* Linn. Skeels in Wistar albino rats was undertaken. [189]

***Tamarindus indica* linn Caesalpinaceae Tamarind**

Plant part used: Leaves

The diuretic activity of aqueous extract of fruit pulp of *Tamarindus indica* L. in rats was evaluated. [190]

***Trarxacum officinale* Asteraceae Common dandelion**

Plant part used: Whole plant

In this pilot study, a high-quality fresh leaf hydroethanolic extract of the medicinal plant *T. officinale* was ingested by volunteers to investigate whether an increased urinary frequency and volume would result. [191]

***Tectona grandis* linn Verbenaceae Teak**

Plant part used: Fruits

Diuretic activity of *Tectona grandis* leaves aqueous extract in wistar rats was studied. [192]

Diuretic activity of *Tectona grandis* linn in rats was reported. [193]

***Tephrosia purpurea* Linn Fabaceae Wild indigo**

Plant part used: Whole plant

Exploration of diuretic potential and electrolyte excretion of whole plant of *Tephrosia purpurea* in rats was investigated. [194]

***Terminalia bellirica* Combretaceae Belleric myrobalan**

Plant part used: Fruits

Diuretic activity with potassium-sparing effect of *terminalia belerica* fruit pulp aqueous extract in wistar albino rats was reported. [195]

***Terminalia chebula* Combretaceae Chebulic myrobalan**

Plant part used: Fruits

Antidiabetic and diuretic activity of polyherbal formulation was evaluated. [196]

Diuretic Activity of Gokshuradi Guggulu (A Multi-Herbal Formulation) was reported. [197]

***Tribulus terrestris* linn Zygophyllaceae Puncture vine**

Plant part used: Roots

Preliminary study of its diuretic and contractile effects of and comparison with *Zea mays* was reported. [198]

Comparative Evaluation of Diuretic Activity of Different Extracts of *Tribulus terrestris* Fruits in Experimental Animals was evaluated. [199]

Diuretic and lithotriptic potential of *tribulus terrestris* linn were reported. [200]

***Vernonia anthelmintica* Willd Asteraceae Purple flee bane**

Plant part used: Fruits

Diuretic activity of *trichodesma indicum* r.br in rats was reported. [201, 202]

***Vernonia cinerea* linn Asteraceae Ash coloured fleebane**

Plant part used: Whole plant

Effect of hydro-alcoholic extract of *Vernonia cinerea* less against ethylene glycol-induced urolithiasis in rats was reported. [203]

***Vigna mungo* linn Fabaceae Black grain**

Plant part used: Roots and seeds

The hepatoprotective and nephroprotective activity of aqueous extract of seeds of *Vigna mungo* (AEVM) against rifampicin-induced liver and kidney damage in rats were investigated. [204]

***Vigna unguiculata* linn Fabaceae Cow pea**

Plant part used: Seeds [205]

***Vitis vinifera* linn Vitaceae Grape vine**

Plant part used: Fruits

A Polyherbal formulation for Diuretic activity in albino rats was evaluated. [206]

***Withania somnifera* Solanaceae Winter cherry**

Plant part used: Roots

Acute Diuretic Activity of *Withania Somnifera* (L) Dunal Leaves in Normal Rats was investigated. [207]

***Zanthoxylum heitzii* Rutaceae Tooth ache tree**

Plant part used: stem bark

The diuretic effects of crude stem bark extraction of *Zanthoxylum heitzii* (Rutaceae) in Wistar rats was evaluated. [208]

***Zea mays* linn Poaceae Maize**

Plant part used: Grains

Diuretic Activity of Aqueous Extract of Cornsilk Confers Mild in Normal Rats was reported. [209]

CONCLUSION

This review is a collection of data on plants having diuretic activity, the data has been compiled from Indian Medicinal Plants, Google scholar, Online Journals, Pubmed, Scirus, Scopus, and Science direct. The number of plants cited in this article may vary to some extent as some more works might have been published at the time of the publication of this article or articles published but are not available on internet. These plants show diuretic and various other activities, in single herbs, combination herbs and poly herbal formulations. This review has been compiled by referring more than 300 articles and references and the plants reported are having diuretic activity. This review will be helpful for researchers working on different diseases and ailments. The phytochemical constituents present in these plants can be extracted and isolated, various poly herbal formulations can be prepared. But researchers cannot prepare and formulate finished products without side effects, but with fewer side effects, but side effects cannot be completely avoided. These plants can be further explored for future studies, and their biological activities can be determined. Safety and Efficacy are another major factor which can be improved with quality control and standardization. Herbal formulations can be prepared economically and physicians can diagnose the poor patients with low cost. Scientists and researchers are still working on the evaluation of new methods that could increase our knowledge and enable us to find new applications for it.

REFERENCE

1. Regilda P. Maramag. Diuretic potential of *capsicum frutescens* linn. *Corchorus olitorius* linn and *abelmoschus esculentus* linn. Asian Journal of Natural & Applied Sciences 2013; 2(1): 60-69.
2. AJM. Christina and P. Muthumani. Phytochemical investigation and Diuretic activity of *Abelmoschus moschatus*. Medikus. International Journal of Pharmaceutical and Chemical Sciences 2012; Vol.1 (4):1311-1314.
3. Anil T. Pawar and Niraj S. Vyawahare. Antiuro lithiatic activity of *Abelmoschus moschatus* seed extracts against zinc disc implantation-induced urolithiasis in rats. J Basic Clin Pharm 2016; 27(2): 32–38.
4. Ligha AE, Bnr1 J, Numere NF. Protective Effect of *Abrus Precatorius* Seed Extract following Alcohol Induced Renal Damage. Eur J Sci Res 2009; 25 (3): 428-436.
5. Raj Kumar Chauhan and BP. Nagori. Diuretic effects of *Abutilon indicum* (linn.) Leaves In rats. IJRPC 2014; 4(2): 303-307.
6. Ramya Krishna. P. S, Bhaduri Lavanya, Pulla Sireesha, S. Nagarjuna and Y. Padmanabha Reddy. Comparative study of *Acacia nilotica* and *Acacia sinuata* for diuretic activity. Der Pharmacia Sinica 2011; 2 (6):17-22.
7. A.K.Das, F. Ahmed, N.N. Biswas, S. Dev, M.M. Masud. Diuretic Activity of *Acalypha indica*. J. Pharm. Sci. 2005; 4(1): 77-78.
8. Saurabh Srivastav, Pradeep Singh, K. K. Jha, Garima Mishra, Shruti Srivastava, M. S. Karchuli et al. Diuretic activity of whole plant extract of *Achyranthes aspera* Linn. Euro. J. Exp. Bio. 2011; 1(2):97-102.
9. Muhammad Asif, Qaiser Jabeen, Muhammad Atif, Amin Malik Shah Abdul Majid and Muhammad Qamar-Uz-Zaman. Diuretic Activity of *Achyranthes aspera* Linn Crude Aqueous Extract in Albino Rats. Trop J Pharm Res 2014; 13(12): 2039.
10. Sutar Niranjana, Dash Kumar Alok, Mishra Kiran Soumya, Goyal Priyanka, Mishra Sangita Susri. Diuretic Activity of *Achyranthes aspera* Leaves Extract. RJP 2012; 3 (4): 216-218.
11. Palani, S., R. Kumar, R.P. Parameswaran and B.S. Kumar. Therapeutic efficacy of *Acorus Calamus* on acetaminophen induced nephrotoxicity and oxidative stress in male albino rats. Acta Pharmaceutica Scientia 2010; 52(1): 89-100.
12. Bhavna Motwano and Rani Singh. Screening of *Achyranthus Aspera*, *Acorus Calamus*, and *Caesalpinia Crista* for Diuretic Activity. Bionano Frontier. 2009; Vol. 2 (1):1-3.
13. Rajamanickam V, Rajasekaran A, quine S, Jesupillai M, Sabitha R. Diuretic activity of *Alangium salvifolium* sub sp. hexapetalum. The Internet Journal of Alternative Medicine. 2008; 8(1). 1-3.
14. B Sivakumar, C Velmurugan, Anurag Bhargava and PR Logesh Kumar. Diuretic Activity of Methanolic Extract of *Albizia lebbbeck*. Journal of Pharmacology and Toxicological Studies 2013; 1-3.
15. S. Tiwari, B. Sirohi, A. Shukla and P. Bigoniya. Phytochemical Screening and Diuretic Activity of *Allium Sativum* Steroidal and Triterpenoid Saponin Fraction. IJPSR 2012; 3(9): 3354-3361.
16. Amuthan A, Chogtu B, Bairy KL, Sudhakar, Prakash M. Evaluation of diuretic activity of *Amaranthus spinosus* Linn. Aqueous extract in Wistar rats. J Ethnopharmacol. 2012; 27 140(2):424-7.
17. Anonymous. The Ayurvedic pharmacopoeia of India. Government of India. 1999; 1(2): 158-159.
18. Mahran GH, Kadry HA, Isaac ZG, Thabet CK, Al-Azizi M.M, El-Olemy MM. Phytotherapy Research 2006, DOI: 10.1002/ptr.2650050406.
19. Smith, F. P. and Stuart, G. A. (1973). Chinese Medicinal Herbs. San Francisco: Georgetown Press.
20. Sunil Koshy, Prinkesh Fanasia, Prima Freeda D'souza, Gopikrishna ,A.R.Shabaraya, Megha Patel, Sajo John et al. Evaluation of Diuretic Activity of Hydroalcoholic Extract of *Artocarpus Heterophyllus* Leaves in Rats. Journal of Basic and Applied Biology 2012; 6 (3&4): 97-101.
21. Sree Saumya A.S, Arun Ravindran, Mohandas Rai, Ramya Kateel, Sreeremya A.S. Evaluation of Diuretic Activity Of ethanolic Extract of *Artocarpus Heterophyllus* Seeds in Albino Wistar Rats. Int. J. Res. Ayurveda Pharm 2016; 7(Suppl 2): 202-206.
22. SG Ternikar, Ismail pasha, Tarun Sharma, Sandeep Dwivedi, Parul Jain, Mohit Joshi, et al. Phytochemical Investigation and Evaluation of Diuretic Activity of Aqueous and Alcohol Extracts of *Baliospermum montanum* (Willd) roots in Male Wistar Rats. Pharmacologyonline 2010; 3: 55-60.
23. K. Sridevi, K. Ravishankar and G.V.N Kiranmayi. Evaluation of Diuretic And Antiuro lithiatic Activities of Ethanolic Leaf Extract of *Basella Alba*. Int J Pharm 2014; 4(1): 145-149.
24. Sachin K Chandavarkar, SN Mamle Desai. Diuretic activity of different extracts of *Biophytum sensitivum* (Linn.) DC. Ayu 2015; 36(3): 356–358.

25. Anil Tukaram Pawar, Niraj S Vyawahare. Anti-urolithiatic activity of standardized extract of *Biophytum sensitivum* against zinc disc implantation induced urolithiasis in rats. J Adv Pharm Technol Res 2015; 6(4):176-82.
26. Sudha Madhuri, Vishal Kalasker, Rambhimaiah and Sreekantha. Evaluation of Diuretic Activity of Aqueous Extract of *Boerhaavia Diffusa* Roots in Rats. Int J Pharm Bio Sci 2013; 4(4): (P) 843 – 848.
27. Abu Afzal Mohammad Shakar, Sharmin Khanam, Muhammad Shahdaat Bin Sayeed, Md. Ahsanul Haque, Md. Moniruzzaman and S.M. Ashraful Islam. Antidiuretic and antidiarrhoeal activities of polar and non-polar extract of *Brassica oleracea*. Journal of Applied Pharmaceutical Science 2012; 02 (08):101-106.
28. Kirankumar Hullatti, Manjunatha JR, Kuppasth IJ. Comparative Study on Diuretic Effect of *Buchanania angustifolia* Roxb and *Buchanania lanzan* Spreng. Fruit Extracts and Fractions. J App Pharm Sci. 2014; 4(8): 059-063.
29. Kumar Anurag, Sutar Niranjan, Sharma Shankar Uma, KumarSailesh, Singh Namrata. Diuretic Activity of *Butea monosperma* flowers extract. Int. Res. J. Pharm. 2013; 4(9): 110-112.
30. Sumayya Sikandari Md Liyaqat Ahmed, Pratima Mathad Antilithiatic. Influence of *Butea monosperma* Lam and *Nigella sativa* Linn on Ethylene Glycol Induced Nephrolithiasis in Rats. International Journal of Scientific and Research Publications 2015; 5(9): 1-9.
31. K. R. W. Abeywickrama, W. D. Ratnasooriya, and A. M. T. Amarakoon. Oral diuretic activity of hot water infusion of Sri Lankan black tea (*Camellia sinensis* L.) in rats. Pharmacogn Mag. 2010; 6(24): 271–277.
32. S. Mohideen, R. Ilavarasan, S. Hemalatha, N. Anitha, E. Sasikala. Wound Healing and Diuretic Activities of *Canthium parviflorum* Lam. Natural Product Science 2008; 9(2): 102-104.
33. Selamu Kebamo, Eyasu Makonnen, Asfaw Debella and Bekesho Geleta. Evaluation of Diuretic Activity of Different Solvent Fractions of Methanol Extract of *Carissa edulis* Root Bark in Rats. Med chem. 2015; 5(11): 472-478.
34. Chandra Prakash K, Kuppasth IJ, Manjunath C, Jawahar N, Jubie S, Swapna B, et al. Diuretic activity of whole plant extracts of *Cardiospermum halicacabum* (linn). Pharmacognosy Magazine 2008; 4(13): 80-82.
35. Sripanidkulchai B, Wongpanich V, Laupattarakasem P, Suwansaksri J, Jirakulsomchok D. Diuretic effects of selected Thia indigenous medicinal plants in rats. J Ethnopharmacol 2001; 75(2-3): 185-190.
36. Wright CI, Van-Buren L, Kroner CI and Koning MMG. Herbal medicines as diuretics: A review of the scientific evidence. Journal of Ethnopharmacology 2007; 114: 1-31.
37. Huang KC. The Pharmacology of Chinese herbs. Boca Ratan, London: CRC Press; 1999. p. 320.
38. Santosh U. Yele, S.B. Gokhale, S. J. Surana, A. Veeranjaneyulu. Diuretic and Laxative Activity of *Cassia Sophera* Linn, a Prevalent Western Ghat Species. Pharmacologyonline 12010: 47-52.
39. Fidele Ntchapda, Joseph Barama, David Romain Kemeta Azambou, Paul Faustin Seke Etet, Theophile Dimo. Diuretic and antioxidant activities of the aqueous extract of leaves of *Cassia occidentalis* (Linn.) in rats. Asian Pacific Journal of Tropical Medicine 2015; 8 (9): Pages 685–693.
40. Mittal Arun, Aggarwal Sushma, Gupta Anil Kumar, Sardana Satish. Acute toxicity and Diuretic studies of leaves of *Cassia occidentalis* Linn. Journal of Pharmacy Research 2011; 4(9):3042-3043.
41. A ThangaThirupathi, A Saraswathy, N Muruges. Study on the diuretic activity of various extracts of *Cayratia Carnosa* (Wall. Ex Wight) Gagnep in albino rats. BioMedRx 2013; 1(4):397-401.
42. Chitrala Roopesh, K. Ruth Salomi, S. Nagarjuna, Y. Padmanabha Reddy. Diuretic Activity of Methanolic and Ethanolic Extracts of *Centella Asiatica* Leaves in Rats. IRJP 2011; 2 (11): 163-165.
43. Wasim Ahmad, chufraan Ahmad, N.A. Khan and "Shamshad Ahmad. Effect of *Cichorium Intybus* Linn on gentamicin model of acute renal impairment in rats. Unanl Nledicus 2013; 2 (1):40-48.
44. Subhash Chandra, Mukesh Kumar, Pradeep Dwivedi, Ku Arti. Studies on Industrial Importance and Medicinal Value of Chicory Plant *Cichorium intybus* L. International Journal of Advanced Research 2016; 4(1): 1060- 1071.
45. Mahmudur Rahman, Amina Khatun, Md. Monirul Islam, Md. Nahid Akter, Sadia Afreen Chowdhury, Md. Ahad Ali Khan, et al. Evaluation of antimicrobial, cytotoxic, thrombolytic, diuretic properties and total phenolic content of *Cinnamomum tamala*. International Journal of Green Pharmacy 2013; 236-243.
46. Bendre Aravind V, Tare Manoj S, Kamble Hemant V, Patil Anujah N, Bhalodia Kishan G. Diuretic Activity of *Cinnamomum tamala* Leaves. Research Journal of Pharmacy and Technology 2010; 3(1): 289-290.
47. Naveen A, Shankar J, Prakash M, Venkatnarayana N, Naveen P. Evaluation of Diuretic Activity of Alcoholic Extract of *Cinnamomum Zeylanicum* in Swiss Albino Rats. IJPRS 2015; V-4 I-2: 417-424.
48. Suresh Babu Sayana, Chitra C. KhanwelKar, VenKat Rao Nimmagadda, JeeVan Mani Babu DaSi, Vasant R. ChaVan, aruna Kutani, et al. Evaluation of Diuretic Activity of Alcoholic Extract of Roots of *Cissampelos Pareira* in Albino Rats. Journal of Clinical and Diagnostic Research 2014; 8(5): HC01-HC04.
49. Avani Pushkar Shah, Snehal Patel, Kirti Patel, Tejal Gandhi. Effect of *Citrus Medica* Linn in Urolithiasis Induced by Ethylene Glycol Model. Iranian Journal of Pharmacology & Therapeutics 2014; 13(1):35-39.
50. Sana Sarfaraz, Ghulam Sarwar, Wajeeha Fatima, Saima Ramzan, Raana Amjad, Ramsha Tareen et al. Evaluation of Diuretic Potential Of Lemon Juice And Reconstituted Lemon Drink. WJPR 2015; 4(7): 254-259.
51. J. J. Piala H. Madissoo B. Rubin. Diuretic activity of roots of *Clitoria ternatea* L. in dogs Experientia February 1962; 18(2): pp 89–89.
52. Ganapathy S, Dash GK, Subbaraju T, Suresh P. Diuretic, laxative and toxicity studies of *Cocculus hirsutus* aerial parts. Fitoterapia 2002; 73:28-31.

53. A. M. Baheti, B. S. Rathi, K. R. Khandelwal, S. L. Bodhankar. Diuretic activity of *Cocos nucifera* husk in rats. Journal of Natural Remedies 2006; 6(1): 35 – 37.
54. BS Rathi, AM Baheti, KR Khandelwal, SR Parakh & SL Bodhankar. Diuretic activity of coconut husk Mashī—an Ayurvedic formulation. Indian Journal of Traditional Knowledge 2006; 5(4): pp. 471-473.
55. Otari Kishor Vasant, Bhalsing Gaurav Vijay, Shete Rajkumar Virbhadrappa, Nandgude Tanaji Dilip, Mali Vishal Ramahari, and Bodhankar Subhash Laxamanrao. Antihypertensive and Diuretic Effects of the Aqueous Extract of *Colocasia esculenta* Linn. Leaves in Experimental Paradigms. Iran J Pharm Res. 2012; 11(2): 621–634.
56. Rini Prastiwi, Siska, Ervina Bhakti Utami, Gigih Pangestu Witji. Antihypertensive and Diuretic Effects of The Ethanol Extract of *Colocasia esculenta* (L.) Schott. Leaves. Jurnal Ilmu Kefarmasian Indonesia 2016; 14(1): 99-102.
57. Aissaoui A, El-Hilaly J, Israili ZH, Lyoussi B. Acute diuretic effect of continuous intravenous infusion of an aqueous extract of *Coriandrum sativum* L. in anesthetized rats. J Ethnopharmacol 2008; 115(1):89-95.
58. Jabeen Q, Bashir S, Lyoussi B, Gilani A. Coriander fruit exhibits gut modulatory, blood pressure lowering and diuretic activities. J Ethno. Pharmacol. 2009; 122(1):123-130.
59. Gajendra Pratap Choudhary. Diuretic Activity of the Leaves of *Crataeva nurvala*. Research & Reviews: A Journal of Pharmaceutical Science, 2011; 2 (1)
60. Shelkea TT, Bhaskarb VH, Adkara PP, Jhaa U, Oswala RJ. Nephroprotective activity of ethanolic extract of stem barks of *Crataeva nurvala* Buch Ham. International Journal of Pharmaceutical Sciences and Research 2011; 2(10): 2712-17.
61. Nabi Shariatifar, Shahram Shoeibi, Moslem Jaferi Sani, Amir Hossein Jamshidi, Ali Zarei, Abbas Mehdizade, et al. Study on diuretic activity of saffron (stigma of *Crocus sativus* L.) Aqueous extract in rat. J Adv Pharm Technol Res. 2014; 5(1): 17–20.
62. Bahareh Amin, Hanieh Moghri Feriz, Alireza Timcheh Hariri, Naser Tayyebi Meybodi, Hossein Hosseinzadeh. Protective Effects of The Aqueous Extract of *Crocus Sativus* Against Ethylene Glycol Induced Nephrolithiasis In Rats. EXCLI Journal 2015; 14:411-422.
63. Amal Hassanin. Evaluation of the diuretic effects of crocin (active constituent of saffron) in rats. Int J Pharm Bio Sci 2015; 6(2): (P) 279 – 284.
64. K. Ravishankar and P.S.V. Vishnu Priya. Evaluation of diuretic effect of ethanolic seed extracts of *macrotyloma uniflorum* and *cucumis melo* in rats. Int J Pharm Bio Sci 2012; 3(3): (P) 251- 255.
65. Nazeem Fahamiya, Mohd. Aslam, Kalim Javid, Aisha Siddiqui, Mohamed Shiffa, Shazad Yaqub, et al. Nephroprotective activity of methanolic extract of *cucumis melo linn*. In gentamicin induced nephrotoxicity. IJDFR 2012; 3 (2): 40-53.
66. Vaijayanthimala Palanisamy, Sureshkumar Shanmugam, Sangameswaran Balakrishnan. Evaluation of Diuretic Activity of Polyherbal Formulation. Int J Pharm 2015; 5(1):244-247.
67. Venkattapuram Sampath Saravanan and Sellimuthu Manokaran. Physico-chemical studies and evaluation of diuretic activity of *Cucurbita maxima*. Bangladesh J Pharmacol 2012; 7: 277-280.
68. Shakira Fathima Syeda, Sam Pavan Kumar G, Md Mohsin, Pushpalatha C. Evaluation of Diuretic Activity of Ethanolic Extracts of *Cucurbita Maxima* seeds in Rats. J Cont Med a Dent 2016; 4 (1): 62-67.
69. Sakshy Sharma, KK Hullatti, SM Prasanna, IJ Kuppast, Paras Sharma. Comparative Study of *Cuscuta reflexa* and *Cassytha filiformis* for Diuretic Activity. Pharmacognosy Research 2009; 1(5): 327-330.
70. K. K. Hullatti, U. V. Gopikrishna, and I. J. Kuppast. Phytochemical investigation and diuretic activity of *Cyclea peltata* leaf extracts. J Adv Pharm Technol Res. 2011; 2(4): 241–244.
71. K.K Hullatti, M.S Sharada and I.J Kuppasth. Studies on diuretic activity of three plants from Menispermaceae family. Der Pharmacia Sinica 2011; 2 (1): 129-134.
72. Christopher Ekpenyong, Nyebuk Daniel, Ernest Akpan. Phytoconstituents and diuretic activity of *Cymbopogon citrates* leaf infusions in humans. Journal of Coastal Life Medicine 2014; 2(9): 704-713.
73. Shivalinge Gowda KP, Satish S, Mahesh CM and Vijay kumar. Study on the Diuretic Activity of *Cynodon dactylon* root stalk Extract in Albino Rats. Research J. Pharm. and Tech. 2009; 2(2): 338-340.
74. Chrifa Sadki, Brahim Hacht, Amrani Souliman, Fouad Atmani. Acute diuretic activity of aqueous *Erica multiflora* flowers and *Cynodon dactylon* rhizomes extracts in rats. Journal of Ethnopharmacology 2010; 128 (2,): 352–356.
75. Wild Carrot Monograph by Emily Peters Vermont Center of Integrative Herbalism, December 2014.
76. D.S.Samiulla, M.S.Harish. Effect of Nr-Ag-I and Nr-Ag-Ii (Polyherbal Formulations) on Diuretic activity in Rat. Indian Journal of Pharmacology 2000; 32: 112-113.
77. NA Aleykutty, KK Srinivasan, P Gundu, AL Udupa, KK Keshavamurthy. Diuretic and antilithiatic activity of *Dendrophthoe falcate*. Fitoterapia 1993; 64 (4): 325-331.
78. Golla U, Gajam PK, Bhimathati SS. Evaluation of diuretic and laxative activity of hydro-alcoholic extract of *Desmostachya bipinnata* (L.) Stapf in rats. J Integr Med. 2014; 12(4):372-8.
79. www.globeinmed.com
80. Laxmikant Maruti Purane and Suryadevara Vidyadhara. Study of Antiurolithiatic activity of *diospyros malabarica* (desr) kostel on rats. Pharmacophore 2015; 6 (6): 299-305.
81. Sahoo Himanshu Bhusan, Swain Sudhanshu Ranjan, Nandy Subhangankar, Sagar Rakeshand Bhajji Amrita. Nephroprotective Activity of Ehanolic Extract of *Elephantophus Scaber* Leaves on Albio Rats. IRJP 2012; 3 (5): 246-250.
82. K.L. Krishna and SS Agrawal. Diuretic Activity of Sufoof-E-Suzak Qawianunani Polyherbomineral Formulation. IJPT 2006; 5(2):167-169.

83. Yogendr Bahuguna, Mohan Singh Maniyri Rawat. Diuretic Activity of Grains of *Eleusine coracana* Linn. Journal of Pharmacy Research 2009; 2(4): 775-776.
84. Ashish K Sahu, Gautam M K, Pradeep T Deshmukh, Lokendra S Kushwah, Narendra Silawat, Zafar Akbar, et al. Effect of embelin on lithium-induced nephrogenic diabetes insipidus in albino rats. Asian Pacific Journal of Tropical Disease. 2013; S729-S733.
85. Phunlap Pompenga et al. Antiangiogenetic effects of anthranoids from *Alternaria* sp., an endophytic fungus in a Thai medicinal plant *Erythrina variegata*. Phytomedicine. 2013; 20 (10): 918–922.
86. Arti Dixit, Ankur Rohilla, Vijender Singh. Review Article *Eucalyptus globulus*: A New Perspective in Therapeutics. International Journal of Pharmaceutical and Chemical Sciences 2012; 1 (4): 1678-1683.
87. Sandeep R. Kane, Vishvesh A. Apte, Sachin S. Todkar, Shrinivas K. Mohite. Diuretic and laxative activity of ethanolic extract and its fractions of *Euphorbia Thymifolia* Linn. Int. J. Chem Tech Res. 2009; 1(2): 149-152.
88. Kanakam Vijayabhaskar, Adduri Shiva Prasad, Mohd Thousif Uddin, Majjiga Vamshi, Gundu Rahul Gopal and Burugadda Ravi. Evaluation of Diuretic Activity on Whole Plant Methanolic Extract of *Euphorbia Hirta* in Rats with Comparison of Furosemide, Vasopressin (Antidiuretic Hormone). WJPPS 2016; 5(5): 1337-1346.
89. Javaid R., Aslam M., Javaid R., Nizami Q., Javed K. and Azhar M.U. Extract of *Ferula foetida* regelreverses gentamicin induced nephrotoxicity in rats. EXCLI Journal 2012; 11:760-66.
90. S. M. Bagheri, H. Mohammadsadeghi, M. H. Dashti-R, S. M. M. Mousavian, Z. A. Aghaei. Effect of *Ferula assa-foetida* oleo-gum-resin on renal function in normal Wistar rats. Indian Journal of Nephrology 2016; 1-4.
91. Ancy P, Padmaja V, Radha K, Jomy Jose, and Hisham A. Diuretic activity of the roots of *Flacourtia indica*. Hygeia.J.D.Med. 2013; 5 (1): Page: 79-83.
92. A. Caceres, L. M. Giron, and A. M. Martinez. Diuretic activity of plants used for the treatment of urinary ailments in Guatemala. Journal of Ethnopharmacology 1987; 19(3): 233–245.
93. Somayyeh Sadrefozalayi, Farah Farokhi. Effect of the aqueous extract of *Foeniculum vulgare* (fennel) on the kidney in experimental PCOS female rats. AJP 2014; 4(2): 110-117.
94. Arsala Mansoor, Sohaib Hudaand Mudassir Asrar. Evaluation of Diuretic Activity of Extracts of *Gentiana oliveri* and Gentianine in Rats. RRJPPS 2015; 4(4): 39-40.
95. N Kayande, P Kushwah. Evaluation of Diuretic Activity of *Glycyrrhiza Glabra* Linn in Experimental Animals. PharmaTutor 2014; 2(6): 167-170.
96. Bhabani Shankar Nayak, Subas Chandra Dinda, P. Ellaiah. Evaluation of diuretic activity of *Gmelina arborea* roxb. Fruit extracts. Asian J Pharm Clin Res 2013; 6 (Suppl1): 111-113.
97. Sravani P, Murali C.M, Syed Samiulla, Sadik Basha S, Soubia Samreen N, Ismail Saheb S, et al. Evaluation of Diuretic Activity of *Gmelina arborea* Roxb. IJAPR 2011; 2 (4): 157- 161.
98. D. Kalyana Narasimha, K. Ravindra Reddy, K.N. Jayaveera, Bharathi T. Study on the Diuretic Activity of *Gossypium Herbaceum* Linn Leaves Extract in Albino Rats. Pharmacologyonline1: 2008:78-81.
99. Mishra D, Broker A. An Ethnomedicinal Study among the Gond of Chhattisgarh: India, Antrocom 2009; 5(1): 61-65.
100. Tine Nikolajsen, Frank Nielsen, VibekeRasch, Pernille H. Sørensen, Flora Ismail, UffeKristiansen, et al. Uterine contraction induced by Tanzanian plants used to induce abortion. Journal of Ethnopharmacology 2011; 137: 921–925.
101. N.I. Khan, J.S. Shinge, N.S. Naikwade. Antilithiatic effect of *helianthus annuus* linn. Leaf extract in ethylene glycol and ammonium chloride induced nephrolithiasis. Int J Pharm Pharm Sci 2010; 2 (Suppl4): 180-184.
102. J. Berhault, *Floore Illustree du Senegal. Govt. Senegal, Min Rural Development*, Water and Forest Division, Dakar, Senegal, 1974.
103. Jignesh G. Shah, Bharat G. Patel, Sandip B. Patel, and Ravindra K. Patel. Antiuro lithiatic and antioxidant activity of *Hordeum vulgare* seeds on ethylene glycol-induced urolithiasis in rats. Indian J Pharmacol 2012; 44(6): 672–677.
104. Preethi GP, Gopalakrishna HN, Rathnakar UP, Durga P, Vishnu and Jnaneshwara shenoy. Acute diuretic activity of alcoholic extracts of *hygrophila auriculata* seeds in normal wistar albino rats. International Journal of Pharma and Bio Sciences 2012; 3(1): 283-289.
105. Md Sarfaraj Hussain KFH Nazeer Ahmed Md Zaheen Hasan Ansari. Preliminary Studies on Diuretic Effect of *Hygrophila auriculata* (Schum) Heine in Rats. International Journal of Health Research 2009; 2(1): 59-64.
106. Deepak, K.D., Siva, S.N., Samanta, S., et al. Antitumor Activity and antioxidant role of *Ichnocarpus Frutescens* against Ehrlich Ascites carcinoma in swiss albino mice. Nat Prod Sci 2007; 13(1):54-60.
107. G. Priyadarsini, A. Kumar, J. Anbu, ashwini anjana and S. Ayyasamy. Nephroprotective activity of decoction of *indigofera tinctoria* (avuri kudineer) against cisplatin-induced nephropathy in rats. IJLSPR 2012; 2 (4):56-62.
108. M. Sucharitha, M. Kotes, K. Devika, Y. Naresh, M. Kiran. Evaluation of Diuretic Activity of aqueous extract of *Ipomoea batatas* (L). Sch. J. App. Med. Sci., 2016; 4(6A):1902-1905.
109. Yogendr Bahuguna, Vijay JuyalMohan Singh Maniyri Rawat, Sunil Jalalpure. Diuretic activity of flowers of *Jasminum auriculatum* Vahl. Journal of Pharmacy Research 2009; 2(2): 215-216.
110. Shan P. Mohammad, Dr. Jyoti Harindran, Kannaki K.S. and Revathy R. Diuretic activity of *kaempferia galanga* linn rhizome Extract in albino rat. World Journal of Pharmacy and Pharmaceutical Sciences 2016; 5 (4): 1161-1169.
111. R. Karthikeyan, R. Mohan Kumar, A. Elphine Prabahar. Diuretic Evaluation of Rhizomes of *Kylligna nemoralis* (Hutch. & Dalz.) Pharmacologyonline1: 2009; 11781183.

112. B. V. Ghule, M. H. Ghante, P. G. Yeole and A. N. Saoji. Diuretic Activity of *Lagenaria siceraria* Fruit Extracts in Rats. Indian Journal of Pharmaceutical Sciences 2007; 187-181.
113. T. Jayasree, Naveen A, Shaikh Ubedulla, N. Chandra Sekhar. Effect of Aqueous Extract of Seeds of *Lagenaria Siceraria* on Urine Volume and Urinary Electrolytes in Swiss Albino Rats. Int. Res. J. Pharm. 2014; 5 (5): 396-399.
114. Chandra Kalyan Reddy, Y, Sandya. L, Sandeep. D, Ruth Salomi. K, Nagarjuna.S, Padmanabha Reddy. Y. Evaluation of diuretic activity of aqueous and ethanolic extracts of *Lawsonia inermis* leaves in rats. Asian Journal of Plant Science and Research 2011; 1 (3):28-33.
115. Umang Patel, Mukul Kulkarni, Vaishali Undale, and Ashok Bhosale. Evaluation of Diuretic Activity of Aqueous and Methanol Extracts of *Lepidium sativum* Garden Cress (Cruciferae) in Rats. Tropical Journal of Pharmaceutical Research 2009; 8 (3): 215-219.
116. Swapnadeep Parial, D.C. Jain and S.B. Joshi. Diuretic Activity of the Extracts of *Limonia Acidissima* in Rats. RASAYAN. J. Chem 2009; 2(1): 53-56.
117. Mahbubar Rahman A H M. Ethno-medico-botanical studies on cucurbits of Rajshahi Division, Bangladesh. Journal of Medicinal Plants Studies. 2013; 1(3):pp.118-125.
118. K. Ravishankar and P.S.V. Vishnu Priya. Evaluation Of Diuretic Effect Of Ethanolic Seed Extracts Of *Macrotyloma Uniflorum* and *Cucumis Melo* In Rats. Int J Pharm Bio Sci 2012; 3(3): (P) 251- 255.
119. M. S. Saluja, B. Sangameswaran, I. S. Hura, Ajay Sharma, S.K. Gupta and M. Chaturvedi. In Vitro cytotoxic activity of leaves of *Madhuca longifolia* against Ehrlich Ascites Carcinoma (EAC) cell lines. International journal of drug discovery and herbal research (IJDDHR) 2011; 1(2): 55-57.
120. Senthil Rajan Dharmalingam, Rajkumar Madhappan, Kumarappan Chidambaram, Srinivasan Ramamurthy, Krishna Gopal, P Swetha, et al. Anti-Urolithiatic Activity of *Melia Azedarach* Linn Leaf Extract in Ethylene Glycol-Induced Urolithiasis in Male Albino Rats. Tropical Journal of Pharmaceutical Research 2014; 13(3): 391-397.
121. Christina, AJM, Najumadeen NAH, Kumar SV, Mainikandan N, Tobin GC, Venkataraman S, et al. Antilithiatic effect of on *Melia azedarach* ethylene glycol-induced nephrolithiasis in rats. Pharma Biol 2006; 44: 480-485.
122. Muhammad Majid Aziz, Najam Us Saqib, Naveed Akhtar, Hafiz Muhammad Asif, Muhammad Jamshaid, Sabira Sultana et al. and Kamran Bashir Phytochemical Screening and Evaluation of the Diuretic Activity of Aqueous Methanol Extract from Aerial Parts of *Mentha viridis* Linn (Labiatae) in Albino Rats. Tropical Journal of Pharmaceutical Research 2014; 13(7): 1121-1125.
123. Bhatt mehul, K., Dholwani kishore, K, Saluja Ajay, K. *Ipomoea reniformis*: a scientific review. International journal of pharmacy and pharmaceutical sciences 2010; 2-4.
124. Husain A, Virmani OP, Popli SP, Misra LN, Gupta MM, Srivastava GN, Abraham Z, Singh AK (1992). Dictionary of Indian Medicinal Plants. CIMAP, Lucknow, India. 546p.
125. Joy PP, Thomas J, Samuel Mathew, Baby P Skaria (1998). Kerala Agricultural University. Arom. Med. Plant Res. pp.106-107.
126. Hafsa Ahmad, Vasundhara Saxena, Anurag Mishra, Rajiv Gupta. Diuretic Activity of Aqueous Extracts of *Michelia Champaca* L. Leaves A_D Stem Bark in Rats. *Pharmacologyonline* 2: 2011; 568-574.
127. Kalabharathi HI, Shruthi SL, Vaibhavi PS, Pushpa VH, Satish AM, Mohammad Sibgatullah. Diuretic Activity of Ethanolic Root Extract of *Mimosa Pudica* in Albino Rats. Journal of Clinical and Diagnostic Research 2015; 9(12): FF05-FF07.
128. A. Bagel, D.S. Rathore, and V. Gupta. Evaluation of diuretic activity of different extracts of *Mimosa pudica* Linn. PJBS 2013; 16(20):1223-1225.
129. Rohith Singh Tahkur, Geeta Soren, Rama Mohan Pathapati, Madhavulu Buchineni. Diuretic activity of *Moringa oleifera* leaves extract in swiss albino rats. The Pharma Innovation Journal 2016; 5(3): 08-10.
130. Bekesho Geleta, Mebrahtu Eyasu, Netsanet Fekadu, Asfaw Debella and Feyissa Challa. Evaluation of Diuretic Activity of Hydro-Ethanolic Extract of *Moringa Stenopetala* Leaves in Swiss Albino Mice. Clin Exp Pharmacol 2015; 5:5 190.
131. Maya S, C. Pramod. Evaluation of anti-nephrolithiatic activity of ethanolic leaf extract of *Morus alba* l. in animal models. Int. Res. J. Pharm. 2014; 5 (5): 427-433.
132. V. Bala, A. Debnath, A.K. Shill and U. Bose. Anti-Inflammatory, Diuretic and Antibacterial Activities of Aerial Parts of *Mucuna pruriens* Linn. International Journal of Pharmacology, 2011; 7: 498-503.
133. Eweka AO, Eweka A. Histological effects of oral administration of nutmeg on the kidneys of adult Wistar rats. N Am J Med Sci. 2010; 2(4):189-192.
134. Digvijay G Kendre, Netaji T Niture, Rohit R Sarda, Dattatreya C Shelke, Kawaljit S Birajdar, Nitin B Ghiware. Antioxidant and Diuretic Activity of *Nardostachys jatamansi* Dc Roots. Am. J. Pharm Health Res 2014; 2(9):85-96.
135. Digvijay G. Kendre, Netaji T. Niture, Nitin B. Ghiware and Shrinivas K. Sarje. Evaluation of diuretic activity of ethanolic and petroleum ether extracts of *Nardostachys jatamansi* DC roots in rats. Der Pharmacia Sinica 2014; 5(4):27-31.
136. Velpandian Venkatachala Pathy, Banumathi Vellian, Mohammed Musthafa, Anbu Natarajan. Diuretic Activity of the Aqueous Extract of *Nardostachys jatamansi* D C In normal Rats. IJSPER 2012; 1(11): 8-13.
137. M. Vishnu Vardhan Reddy, A. Rajani, K. Hemamalini, SV. Rama Raju. Diuretic activity of methanolic seed extract of *nelumbo nucifera* Gaetrn. Int J Pharm Pharm Sci 2014; 6(1): 498-499.
138. Prathibhakumari P. V and G. Prasad. Pharmacological investigation on the diuretic activity of the aqueous fruit extract of *Neolamarckia cadamba* (Roxb) Bosser. Journal of Pharmacy Research 2014; 8(2): 130-135.
139. Mondal S, Dash G. K, Acharyya A, Acharyya S and Sharma H.P. Studies on diuretic and laxative activity of bark extracts of *Neolamarckia cadamba* (Roxb.) Bosser. Drug Invention Today 2009; 1(1): 78-80.

140. Claudia-Crina Toma, Neli-Kinga Olah, Laurian Vlase, Cristina Mogoşan, and Andrei Mocan. Comparative Studies on Polyphenolic Composition, Antioxidant and Diuretic Effects of *Nigella sativa* L. (Black Cumin) and *Nigella damascena* L. (Lady-in-a-Mist) Seeds. *Molecules* 2015; 20: 9560-9574.
141. D. Sasmal, Sanjita Das, S. P. Basu. Diuretic activity of *Nyctanthes arbortristis* Linn. *Anc Sci Life* 2007; 27(2): 19–23.
142. Preethi G Pai, Umma Habeeba, Nishith RS, and Jnaneshwara P Shenoy. Evaluation of Diuretic Activity of Ethanolic Extract of *Ocimum Sanctum* (L) in Wistar Albino Rats. *RJPBCS* 2013; 4 (1): 533-538.
143. Adikay S, Usha U, Koganti B. Effect of chrysin isolated from *Oroxylum indicum* against cisplatin induced acute renal failure. *Recent Res Modern Med* 2011; 302-307.
144. Goyal PK, Verma SK, Sharma AK. Antiuro lithiatic potential of *Parmelia Perlata* extract against AMPH crystals. *CT Int.J Pharm. Integrated Life Sci.* 2015; 1(1):40-44.
145. Shelke TT, Kothai R, Adkar PP, Bhaskar VH, Juvele KC, Kamble BB, et al. Nephroprotective activity of ethanolic extract of dried fruits of *Pedalium murex* linn. *J Cell Tissue Res* 2009; 9(1):1687-1690.
146. Adikay S, Latha JP, Koganti B. Effect of fruits of *pedilum murex* against cadmium chloride-induced nephrotoxicity in rats. *Int J Drug dev & res* 2010; 2(2):40-46.
147. Sreedevi A, Jyothi Prasanna Latha Y and Bharathi K. Protective Effect of Fruits of *Pedalium Murex* against Gentamicin -Induced Nephrotoxicity in rats. *Int. j. Drug. Dev & Res* 2011; 2(2): 40-46.
148. Divyesh R. Mandavia, Mahendra K. Patel, Jayshree C. Patel, Ashish P. Anovadiya, Seema N. Baxi, Chandrabhanu R. Tripathi. Anti-Urolithiatic Effect of Ethanolic Extract of *Pedalium Murex* Linn. Fruits on Ethylene Glycol-Induced Renal Calculi. *Urology Journal* 2013; 10 (3): 946-952.
149. Al Qarawi AA, Abdel-Rahman H, Ali BH, Mousa HM, El-Mougy SA. Nephroprotective Action of *Phoenix dactylifera* in gentamicin-induced nephrotoxicity. *Pharm Biol* 2008; 46:227–230.
150. Ahmed AF, Al-Qahtani JH, Al- Yousef HM, Al-Said MS, Ashour AE, et al. Proanthocyanidin-rich date seed extract protects against chemically induced hepatorenal toxicity. *J Med Food* 2015; 18:280-289.
151. Saafi-Ben SEB, El AA, Louedi M, Saoudi M, Elfeki A, et al. Antioxidant-rich date palm fruit extract inhibits oxidative stress and nephrotoxicity induced by dimethoate in rat. *J Physiol Biochem* 2012; 68: 47-58.
152. Sangita Shukla, Rashmika Patel, Rajiv Kukkar. Study of Phytochemical and Diuretic Potential of Methanol and Aqueous Extracts of Aerial Parts of *Phyla Nodiflora* linn. *International Journal of Pharmacy and Pharmaceutical Sciences* 2009; 1 (1): 85-91.
153. Sujatha Dodoala, Ranganayakulu Diviti, Bharathi Koganti and K V S R G Prasad. Effect of ethanolic extract of *Phyla nodiflora* (Linn.) Greene against calculi producing diet induced urolithiasis. *Indian Journal of Natural Products and Resources* 2010; 1(3): pp. 314-321.
154. Suci Nar Vikasari, Elin Yulinah Sukandar, Afifah Bambang Sutjiatmo, Soraya Riyanti. Diuretic Effect of The Ethanol Extracts of *Phyllanthus Acidus* L (Skeels) Leaves In Wistar Rats. *Int J Pharm Pharm Sci* 2015; 7 (1): 120-123.
155. Obianime AW, Uchie FI. The phytochemical screening and the effects of methanolic extract of *Phyllanthus amarus* leaf on the biochemical parameters of male guinea pigs. *Journal of Applied Sciences and Environmental Management* 2008; 12(4):73-77.
156. Wright CI, Van-Buren L, Kroner CI, Koning MM. Anti-allodynic and anti-oedematogenic properties of the extract and lignans from *Phyllanthus amarus* in models of persistent inflammatory and neuropathic pain. *J Ethnopharmacol* 2007; 114:1-31.
157. Yokozawa T, Kim HY, Kim HJ, Tanaka T, Sugino H, Okubo T, et al. Chu D, Juneja LR. Amla (*Emblica officinalis* Gaertn.) Attenuates Age-Related Renal Dysfunction by Oxidative Stress. *Journal of Agricultural and Food Chemistry* 2007; 55: 7744-52.
158. A. L. Udupa, Sanjeeva, Adarsh Benegal, Vinay Prusty, G. Prabhath Kodancha, M. C. Satish Kumar, et al. Diuretic activity of *Phyllanthus niruri* (Linn.) in rats. *Health* 2010; 2(5): 511-512.
159. Qazi Zaid Ahmad, Aziz UR Rahman, MD Imran Khan, Tajuddin. Diuretic Activity of Kabab Chini (*Piper cubeba*): An experimental Study. *IJMPR* 2014; 2(1): 446-450.
160. Roshan Patel, Naveen K Mahobia, Ravindra Gendle, Basant Kaushik, Sudarshan K Singh. Diuretic activity of leaves of *Plectranthus amboinicus* (Lour) Spreng in male albino rats. *Pharmacognosy Research* 2010; 2 (2): Page: 86-88.
161. Khan H, Saeed M, Gilani AU, Khan MA, Dard A, Khan I. The antinociceptive activity of *Polygonatum verticillatum* rhizomes in pain models. *J Ethnopharmacol* 2010; 127: 521-7.
162. Khan H, Saeed M, Gilani AH, Khan MA, Khan I, Ashraf N. Antinociceptive activity of aerial parts of *Polygonatum verticillatum*: attenuation of both peripheral and central pain mediators. *Phytother Res* 2011; 25: 1024-30.
163. Lamiaa Barakat AA, Rasha Hamed Mahmoud. The antiatherogenic, renal protective and immunomodulatory effects of Purslane on hypercholesterolemic rats. *North American Journal of Medical Sciences* 2011; 3(9):351-357.
164. D.V. Kishore, Fouzia Moosavi, Dr. R.K. Varma. Effect of ethanolic extract of *portulaca oleracea* linn. On ethylene glycol and ammonium chloride induced urolithiasis. *Int J Pharm Pharm Sci* 2013; 5 (2): 134-140.
165. S.F Sobeiri, S. Sharie, A. Heidari, S. Kianbakht. *Portulaca oleracea* L. in the treatment of patients with abnormal uterine bleeding: a Pilot clinical trial. *Phytother Res.* 2009; 23(10): Pages 1411–1414.
166. Saravanan C., Shantha kumar S., Anandan R., Narayanaswamy V.B., Varunraj S. Anti-Inflammatory and Diuretic Effect of Plant Extracts of *Pseudarthria Viscida*(L) Weight & Arn. *IJRAP* 2010; 1 (2): 506-509.
167. Vaishali Mute, Deorao Awari, Pallavi Vawhal, Aditi Kulkarni, Utkrash Bartakke and Rachana Shetty. Evaluation of diuretic activity of aqueous extract of *Raphanus sativus*. *EJBS* 2011; 3(1): 13-15.
168. Thakkar Tejas, Patel Rakesh, Soni Hardik, Patel Ghanshyam. Evaluation of Acute Toxicity Study and Diuretic Activity of Ural Syrup. *Int. J. Res. Ayurveda Pharm.* 2013; 4(4): 522-525.

169. Brahma Srinivasa Rao Desu, Supriya U, Vara Lakshmi TN. Evaluation of Diuretic Activity of *Ricinus Communis* Leaves Extract. An International Journal of Advances in Pharmaceutical Sciences 2012; 3 (6): 405-409.
170. Gillotra Umesh Kr.I, Christina A.J.M. Effect of *Rotula aquatic* Lour. On ethylene-glycol induced urolithiasis in rats. Int. J. Drug Dev. & Res., 2011; 3(1):273-280.
171. M. Sathya and R. Kokilavani. Effect of *Saccharum spontaneum* Linn on Lysosomal enzymes of Uro-lithiatic rats. Journal of Applied Pharmaceutical Science 2012; 2(9): pp. 122-126.
172. M. sathya and Dr. R. kokilavani. Preventive Effect of *Saccharum Spontaneum* Linn. Against Glycolic Acid – Induced Urolithiasis In Male Wistar Albino Rats. Int J Pharm Bio Sci 2013; 4(1): (B) 1 – 10.
173. U. Bhadoriya, A. Suthar, A. Dubey, A. Aggarwal. Diuretic Activity of Methanolic Extract of Leaves of *Salvadora Persica* L rom. J. Biol. – plant biol., 2010; 55, n1: p. 3–7.
174. Debjit Bhowmik, Dipak Biswas, K.P. Sampath kumar. Recent Aspect of Ethnobotanical Application and Medicinal Properties of traditional Indian Herbs *Santalum Album*. 21-27.
175. M. Chinna Eswaraiah, A. Elumalai, M.Nikhitha, Areefa. S, A. Mamatha, Usha, Srikanth N. Evaluation of Diuretic Activity of Aqueous and Methanol Extracts of *Sesbania grandiflora* Linn in Rats. International Journal of Pharm Tech Research 2012; 4(2): pp 835-838.
176. Narendra Naik D, Kalugonda Murali Krishna, Jayasri P and A. Elumalai. Evaluation of diuretic activity of *Sida spinosa* linn leaves extract. J. Chem. Pharm. Res., 2011; 3(6):1004-1008.
177. Dipti Ranka, Manoj Aswar, Urmila Aswar & Subhash Bodhankar. Diuretic potential of aqueous extract of roots of *Solanum xanthocarpum* Schrad & Wendl, a preliminary study. Indian Journal of Experimental Biology 2013; 51:pp. 833-839.
178. Patel PK, Patel MA, Saralai MG, Gandhi TR. Antiuro-lithiatic Effects of *Solanum xanthocarpum* Fruit Extract on Ethylene-Glycol-Induced Nephrolithiasis in Rats. Journal of Young Pharmacists 2012; 4(3): 164-170.
179. M.T. Deshmukh, R.V. Shete, V.T. Deshmukh, S.R. Borate, S.V. Deshmukh. Preclinical evaluation of diuretic activity of aqueous extract of *Solanum xanthocarpum* leaves in experimental animals. Current Pharma Research 2013; 3 (4):1023-1026.
180. Kalyanasundar B, Josephin Nerling Rashida G, Chandrasekar M, Devi P, Nagarajan M. Evaluation of diuretic activity of *Solanum nigrum* Linn. Int. J. Res. Phytochem. Pharmacol. 2011; 1(1): 33-35.
181. R.V. Ramanarayana Reddy, K Uma Maheshwara Rao, Yakaiah Vangoori, J. Mohana sundharam. Evaluation of diuretic and anti-inflammatory property of ethanolic extract of *solanum surattense* in experimental animal models. Int J Pharm Pharm Sci, 2016; 6(1): 387-389.
182. Patil Suhas A and Sambrekar Sudhir N. Diuretic Potential of Whole Plant Extract of *Solanum Surattense burm* in Experimental Rats. International Journal of Pharmaceutical and Chemical Sciences 2012; 1 (4): 1380-1386.
183. Muhammad Masood Ahmed, Shumaila Andleeb, Fatima Saqib, Musaddique Hussain, Most. Nurtaf Khatun, Bashir Ahmad Ch, et al. Diuretic and serum electrolyte regulation potential of aqueous methanolic extract of *Solanum surattense* fruit validates its folkloric use in dysuria. BMC Complement Altern Med. 2016; 16: 166.
184. Galani, V.J. and B.G. Patel. Psychotropic activity of *Sphaeranthus Indicus* Linn. In experimental animals. Phcog. Res., 2009; 1: 307–313.
185. Srinivasan VM, Jessy KK, Alex AE. Effect of *Sphaeranthus indicus* Linn on gentamicin induced acute renal failure in rats. Indian J Pharmacol 2008; 40:71.
186. Mathew, J.E., Joseph, A., Srinivasan, K., Dinakaran, S.V., Mantri, A., Movaliya, V., Effect of ethanol extract of *Sphaeranthus indicus* on cisplatin-induced nephrotoxicity in rats. Nat Pro Res: Formerly Natural Product Letters 2012; 26(10): 933-938.
187. Biswas S, Murugesan T, Maiti K, Ghosh L, Pal M, Saha BP. Study on the diuretic activity of *Strychnos potatorum* Linn. Seed extract in albino rats. Phytomedicine 2001; 8:469-71.
188. E. Venkateshwarlu B. S. Sharvana Bhava R. Shiva Kumar Rao J. Venkateshwar E. Gouthami K. Umasankar. Evaluation of diuretic activity of *Syzygium cumini* and its effect on prostaglandin system. Oriental Pharmacy and Experimental Medicine 2015; 15 (1): pp 45–51.
189. Chandavarkar Sachin, Mamle Desai S. N. Diuretic activity of different extracts of bark of *syzygium cumini* (linn.) Skeels Int. J. Res. Ayurveda Pharm. 2014; 5(1):102-104.
190. Sammodavardhana Kaundinnayana, Satish Kumar Mahadevaiahchandraiah, Alaya Laxminarayana Udupa. Evaluation of Diuretic Activity of Aqueous Extract of Ripe Fruit Pulp of *Tamarindus indica* L. in Rats. MJSBH 2015; 14 (2): 22-27.
191. Bevin A. Clare, M.S., Richard S. Conroy, Ph.D., and Kevin Spelman, Ph.D. (Cand.) a The Diuretic Effect in Human Subjects of an Extract of *Taraxacum officinale* Folium over Single Day. J Altern Complement Med. 2009; 15(8): 929–934.
192. Kore KJ, Jadhav PJ, Shete RV, Shetty SC. Diuretic activity of *Tectona grandis* leaves aqueous extract in wistar rats. Int J Pharmaceutical Res and development 2011; 3(7): 141-146.
193. Phalphe SG, Gawai Ashish, Biyani KR, Shete RV, Kore KJ, Chaudhari SR et al. Evaluation of Diuretic activity of *Tectona grandis* linn in rats. World J Pharm Pharm Sci. 2013; 2 Suppl 1: 245-252.
194. Ashok kumar D, Narayana TV, Vidyasagar, Mazumder UK, Gupta M. Exploration of diuretic potential and electrolyte excretion of *Tephrosia purpurea* (Fabaceae) in rats. Journal of diet supplement 2012; 9(1):9-18.
195. Mohandas Rai, Chandrashekar R, Manohar VR, Ramya Kateel. Potent and Efficacious Diuretic Activity With Potassium-Sparing Effect Of *Terminalia Belerica* Fruit Pulp Aqueous Extract In Wistar Albino Rats. Asian J Pharm Clin Res, 2016; 9 Suppl. 1:241-243.
196. Hemalatha S, Ayyappan T, Shanmugam S, Nagavalli D & Shrivijaya Kirubha T. Evaluation of antidiabetic and diuretic activity of polyherbal formulation. Indian Journal of Traditional Knowledge 2006; Vol. 5(4):pp. 468-470.

197. Fernando, WMAL, Weerasekera, KR., Jayakody, JRAC, Ratnasooriya, WD. Diuretic Activity of Gokshuradi Guggulu (A Multi-Herbal Formulation) In Rats. IJPRAS 2015; 4(1):8-10.
198. Al-Ali M, Wahbi S, Twajj H, Al-Badr A. *Tribulus terrestris*: Preliminary study of its diuretic and contractile effects and comparison with *Zea mays*. J Ethnopharmacol. 2003; 85:257–60.
199. Chhatre S, Nesari T, Somani G, Kenjale R, Sathaye S. Comparative Evaluation of Diuretic Activity of Different Extracts of *Tribulus terrestris* Fruits in Experimental Animals. Int J Res Phytochem Pharmacol. 2012; 3:129–33.
200. Taufiq Ahmad and Nizamul Haque. diuretic and lithotriptic potential of *tribulus terrestris* (khar khasak) linn.-a comprehensive review WJPPS 2016; 5(7): 375-383
201. Manani lata M., Kakrani Purvi and Dr. Saluja Ajay K. evaluation of diuretic activity of *trichodesma indicum* r.br in rats. Int J Pharm Bio Sci 2014; 5 (2): (P) 129 - 133
202. BN Kumar S, Swamy BMV, Swamy A, Murali A.A Review on Natural Diuretics. Res J Pharm Biol Chem Sci. 2010; 1(4): 615.
203. Ravindra D Hiremath, Sunil S Jalalpure. Effect of hydro-alcoholic extract of *Vernonia cinerea* less against ethylene glycol-induced urolithiasis in rats. IJP 2016; 48 (4): 434-440.
204. Nitin. M, Ifthekar. S and Mumtaz. M. Hepato and Nephro-Protective Effect of Methanolic Extract of *Vigna mungo* (Linn.) Hepper on Rifampicin Induced Toxicity in Albino Rats. Ind J Pharm Edu Res 2013; 47(1): 90-96.
205. Chandrasekaran Suruthi, Rajkishore Vijaya Bharathi, Ramalingam Radha. *Vigna unguiculata*-An Overall Review. Research Journal of Pharmacognosy and Phytochemistry 2015; 7(4): 219-222.
206. Sahoo Himanshu Bhusan, Asati Anuj Kumar, Toppo Fedelic Ashish, Kori Mohan Lal. Evaluation of Polyherbal formulation for Diuretic activity in albino rats. Asian Pacific Journal of Tropical Disease 2012; S442-S445.
207. Avijeet Jain Lokesh Deb, Sunita Panchawat, Anurekha Jain, V.B. Gupta. Acute Diuretic Activity of *Withania Somnifera* (L.) Dunal Leaves in Normal Rats. NPAIJ 2006; 2(3-4): 81-83.
208. Fidèle Ntchapda, Maguirgue Kakesse, Michel Archange Tagne Fokam, Olivier Mbouemboue Pancha, Djedouboum Abakar, Théophile Dimo. Evaluation of the diuretic effects of crude stem bark extraction of *Zanthoxylum heitzii* (Rutaceae) in Wistar rats. Journal of Integrative Medicine 2015; 13(5): 326-335.
209. M.A. Solihah, A.R. Nurhanan, W.A. Wan Amir Nizam & W.I. Wan rosli. Aqueous Extract of Cornsilk Confers Mild Diuretic Activity in Normal Rats. Sains Malaysiana 2015; 44(8): 1167–1174.



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