INTRODUCTION
This work is based on one of the practices widely used by Indian Brahmins all over using a holy grass named Darbha. It’s botanical name is Eragrostis cynosuroides (Retz.) P. Beauv. In hindi it is called as Kus or Kusha. In all the religious belief this Darbha grass used most commonly in all auspicious or inauspicious functions, a performing person needs to wear a ring made of this Darbham, but many have lost the reason of why it is to be used. In this work we employed different methods to investigate the scientific reasons for use of this grass in religious work. Eragrostis comes from two Greek words, Ερως (Eros), the god of Love, and αγρωστις (agrostis) a type of grass – hence the name of the Lovegrass genus.

While chanting and reciting some Vedic phrases and verses, one needs to wear a ring made of Darbham on his right hand ring finger. This is most essential, while performing all the rituals, such as pooja, Homas and all sorts of Havans. The count of leaves depends upon the function that is held viz.: for some functions related to death only single leaf Darbham is used; for auspicious and daily routine a three leaf Darbham ring is used. And for the Temple Prayer and Pooja, a Four-leaf Darbham ring is used. Also, when a fire ritual (Homas) is performed, these Darbhams are spread all the four sides of the agnikunda.

Medicinal plants are considered new resources for producing agents that could act as alternatives to antibiotics in the treatment of antibiotic-resistant bacteria. The aim of this study was to evaluate the antibacterial activity darbha grass plant extracts. Medicinal and aromatic plants are used on a large scale in medicine against drug-resistant bacteria, which are considered one of the most important reasons for the lack of success of treatment in infectious diseases. Medicinal plants are the major sources of new medicines and may constitute an alternative to the usual drugs.

REVIEW OF LITERATURE
Traditional Use
The Kusa has religious significance with socio-cultural back ground and ceremonial utility in Indian traditions as a sacred plant. As single drug as well as an ingredient of trunapan-chamoola and some other preparations, is used in the disease of urinary system Trunapanchamoolo decoction is given in dysuria caused by the pitta humour. In calculus Kusadaya Grantham and kusavaleha are prescribed in treatment of piles, kusa root is mixed with bala root (Sida cordifolia Linn) and given with rice soup and this recipe is considered useful to check bleeding from piles or haemorrhoids and menorrhagia. Kusa and some other drugs suitably selected are made a decoction which is externally applied to clean wounds. The root of kusa pounded with rice soup, is taken in pradara roga and same preparation is taken for three days for checking the bleeding. Decoction of root with paste of 21 black peppers used in constitutional disorders. Roots useful in treatment of wounds and pimplies (Charaka Sanhita). Useful in studying corpse (Sushruta Sanhita). Decoction of root is useful in indigestion (Bhavprakash). Roots beneficial in menorrhagia (Chakradatta). Root paste consumption is good in bleeding piles (Bangasena). Extraction of leaves beneficial in pimplies (Agni Purana).

Ayurveda
Root-paste : consumption is good in blood dysentery and in piles, using the same as ointment over a skin helps to remove bad odour of the body. Root extract : consumption along with the stem of Tribulus terestris and bark of Cre-taeva religiosa helps to dissolve gall-stone.

Sacred values
The ‘Darbha’ grass is needed in the funeral ceremonies of Hindus and the chief mourner wears a ring of the grass on his finger. It is also placed beneath the pindas. It is mentioned in Chaturmas Mahatmya. Many articles were cited in reference to experimental plant regard it’s important in metaphysics.
The study of antioxidant activity of the plant was assessed in Cyperus rotundus, which was extracted by using different extraction solvents and evaluated for their antioxidant activity using different in vitro antioxidant assays by Asad Bashir in 2012. Behboud Jafari et al. showed that methanol extract of lemon grass plant prevented bacterial growth of Staphylococcus aureus, Bacillus cereus and Escherichia coli which with increasing concentration, their antibacterial effect also increased. Nooman A. Khalaf et al. (2008). were screened methanolic crude extracts of some commonly used medicinal plants for their free radical scavenging properties using ascorbic acid as standard antioxidant. Free radical scavenging activity was evaluated using 1,1-diphenyl-2-picrylhydrazyl (DPPH) free radical. The overall antioxidant activity of green tea (Camellia sinensis Linn.) was the strongest, followed in descending order by black tea (Camellia sinensis Linn.), Eugenia caryophyllus (Spreng.) Bullock and Harrison, Piper nigrum, Linn., Trigonella foenum graecum, Linn. and Elettaria cardamomum (Linn.) Zingiber officinale, Roscoe and Piper nigrum, Linn. Trigonella phyllus (Spreng.) Bullock and Harrison, Piper cubeba Linn., order by black tea (Camellia sinensis Linn.), Eugenia Caryophyllus radical. The overall antioxidant activity of green tea (Camellia sinensis Linn.) was evaluated using 1,1-diphenyl-2-picrylhydrazyl (DPPH) free radical. Free radical scavenging activity was evaluated using ascorbic acid as standard antioxidant. Free radical scavenging activity was evaluated using 1,1-diphenyl-2-picrylhydrazyl (DPPH) free radical. The overall antioxidant activity of green tea (Camellia sinensis Linn.) was the strongest, followed in descending order by black tea (Camellia sinensis Linn.), Eugenia caryophyllus (Spreng.) Bullock and Harrison, Piper nigrum, Linn., Trigonella foenum graecum, Linn. and Elettaria cardamomum (Linn.) Maton.

**MATERIAL METHODS**

**DISSOLVE OXYGEN**

Fill the oxygen bottles to over flowing with water sample. Add 1ml of Wrinkler’s reagent A and 1ml of Wrinkler’s reagent B.Place the inverted glass stopper and keep for 15 min. After 15 min. remove the stopper and add 1ml of conc. HCl and replace the stopper quickly.Mix the content of the bottle vigorously and dissolved the precipitate, if the precipitate in the bottle is not dissolve completely add more of conc.HCl a few drop till the precipitate dissolves.Take out 50ml of this treated in a conical flask and add 2-3 drops of starch indicator and titrate it against 0.014N Na2S2O3 solution till the mixture become colorless. Note burette reading. Then in given water sample add chopped pieces of Ergotis cymosuroides Beauv. Agrost. Place this water for 10 days. After 10 days take a reading of dissolve oxygen of the water by repeating the above procedure. Dissolve oxygen can be calculated by the following formula.

**CONDUCTIVITY**

1gm plant material was taken and crushed in mortar and pestle in water and prepare plant extract. 1ml conc.plant extract was pipette out and was transfer to the 2nd test tube containing 9ml distilled water.This procedure ( serial dilution) was repeated and 5 test tubes of serial dilution were prepared. Then the reading was taken of above dilutions using conductometer.

**ANTIOXIDATION**

**Water Extract** - 5 gm. dried sample was chopped into small parts in a blander then extracted with 100 ml of boiled water by stirring foe 30 min. followed by filtration. Afterwards filtrate was dried by keeping on water bath.

**Antioxidant Activity by Thiocynate Method**
Each sample containing 500µg to 1000 µg extract in 0.5 ml of distilled water was mixed with 2.5 ml of linoleic acid emulsion (0.02 M, in 0.04 M, pH 7 phosphate buffer).To this add 1gm plant material was taken and crushed in mortar and pestle in water and prepare plant extract. 1ml conc.plant extract was pipette out and was transfer to the 2nd test tube containing 9ml distilled water. This procedure (serial dilution) was repeated and 5 test tubes of serial dilution were prepared. Then the reading was taken of above dilutions using conductometer.

**OBSERVATIONS AND RESULTS**

**A) DISSOLVE OXYGEN**

Observation Table – Part I (Without Darbha)

| Readings | Burette Reading in cm³ | C.B.R in cm³ |
|----------|-------------------------|--------------|
| I        | I                       | 1.2          |
| II       | II                      |              |
| III      | III                     |              |
|          |                         |              |

Observations – Part II (After with Darbha)

| Readings | Burette Reading in cm³ | C.B.R in cm³ |
|----------|-------------------------|--------------|
|          |                         |              |
| I        | II                      | 3.5          |
| II       | III                     |              |
|          |                         |              |

Result –
1) Amount of Oxygen dissolved is 2.68 gms O2 / lit.
2) Amount of Oxygen dissolved after 10 days is 19.04 gms O2 / lit.

**B) ANTIOXIDATION**

In this experiment antioxidant activity was determined by thiocynate method in that the amount of peroxides formed during incubation was determined spectrometrically by measuring absorbance at 500 nm.
CONCLUSION AND DISCUSSION

The detailed study of *Eragrostis cynosuroides* Beauv. Agrost. was carried by extraction of fresh plant extract and also dry plant powder in aqueous form. We use only aqueous extract for experiment as in all religious function and purana referred is used with water only. The biological and analytical property such as dissolved oxygen, antioxidant, conductivity, absorbance, has been worked out properly.

Dissolve oxygen is purity indicator of water. Water incubated with *Eragrostis cynosuroides* Beauv. Agrost. reveals increase in dissolve oxygen; therefore the weight and period of incubation has to find out by proper way and detailed study.

Conductivity of plant extract is comparatively good which indicates free ions in solution. This conductivity of extract is indicator of good sign for human health, as it used in punchagavya and tirtha; as body purifier. Conductivity of solution is inversely proportional to concentration gradient.

The detailed study on Antioxidant activity of leaves of *Cydonia vulgaris* was done by Yildirim et al (2001). They showed that antioxidant activity of the water, as well as ethanol extracts of the leaves of *C. vulgaris* increased with increasing amount of extract. But in case of *Eragrostis cynosuroides*, Beauv.Agrost. such condition was not observed. Antioxidant activity of extract was irrespective of its concentration. Unlike *Cydonia vulgaris*, Aqueous concentration of plant has shown great results.

The antioxidant property of extract gives good result and it depends on concentration of solution and incubation period. The diluted extract regret its activity where as incubation period is directly proportional to the antioxidant activity.

### CONCLUSION AND DISCUSSION

The detailed study of *Eragrostis cynosuroides* Beauv. Agrost. was carried by extraction of fresh plant extract and also dry plant powder in aqueous form. We use only aqueous extract for experiment as in all religious function and purana referred is used with water only. The biological and analytical property such as dissolved oxygen, antioxidant, conductivity, absorbance, has been worked out properly.

Dissolve oxygen is purity indicator of water. Water incubated with *Eragrostis cynosuroides* Beauv. Agrost. reveals increase in dissolve oxygen; therefore the weight and period of incubation has to find out by proper way and detailed study.

Conductivity of plant extract is comparatively good which indicates free ions in solution. This conductivity of extract is indicator of good sign for human health, as it used in punchagavya and tirtha; as body purifier. Conductivity of solution is inversely proportional to concentration gradient.

The detailed study on Antioxidant activity of leaves of *Cydonia vulgaris* was done by Yildirim et al (2001). They showed that antioxidant activity of the water, as well as ethanol extracts of the leaves of *C. vulgaris* increased with increasing amount of extract. But in case of *Eragrostis cynosuroides*, Beauv.Agrost. such condition was not observed. Antioxidant activity of extract was irrespective of its concentration. Unlike *Cydonia vulgaris*, Aqueous concentration of plant has shown great results.

The antioxidant property of extract gives good result and it depends on concentration of solution and incubation period. The diluted extract regret its activity where as incubation period is directly proportional to the antioxidant activity.