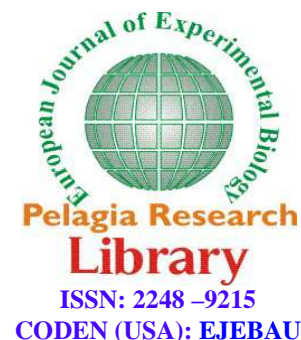




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### Antidiabetic natural medicines at house garden [ADNMHG]

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#### ABSTRACT

*The aim of present research work is to focus the potency and benign nature of Antidiabetic Natural Medicines at House Garden [ADNMHG]. In nature the best Doctor is Plant body which contains Roots, Stem, Leaves, Flowers, Fruits, Seeds, Bark, Powder of Leaves, Seeds, Roots and Bark, Juice of Leaves, Vegetables and Leaf vegetables, etc., are known as "Natural Medicines" for the treatment of Human diseases. House Gardens are the most popular ancient natural fields to produce Natural medicines from Health Care Medicinal Plants. Recently in the present research work 11 antidiabetic Natural medicines of 11 antidiabetic medicinal plants were detected form House Garden of Dr.Ch. Srinivasa Prasadacharyulu, at Rajendra Nagar, Guntakal, Anantapuramu [Dt], Andhra Pradesh, India. Inefficiency and insufficiency of Insulin disorder Diabetes mellitus is a very severe growing public health problem in developed and developing Countries. The detected 11 Antidiabetic Natural Medicines are benign and their traditional therapy is very simple to treat diabetes mellitus, so the 11 antidiabetic natural medicines are recommended to treat diabetes mellitus at present and in future.*

**Key words:** House Garden of Dr. Ch. Srinivasa Prasadacharyulu, Rajendra Nagar, Guntakal, 11 Antidiabetic Natural Medicines, Benign traditional therapy and Diabetes mellitus.

#### INTRODUCTION

About 12.5% of the total 4,22,000 plants species documented World Wide are reported to have medicinal values [ Schippmann et al;2002]. The medical heritage of India is claimed to use raw drugs pertaining to some 7500 medicinal plant species [Pushpangadan, 1995]. The Indian systems of medicine Ayurveda, Siddha, Unani and Homeopathy depend on plant materials or their derivatives for treatment of human ailments [ Prajapathi et al;2003]. Home Gardens have traditionally been a source of medicinal plants to treat different ailments of human being. Traditional medicinal use value of plant species commonly found in Home gardens has been reported by several studies. Various roles of Home gardens, emphasized the contribution of medicinal plants from Home gardens for Well- being of people as an important role [ Galhena et al;2013]. Medicinal Plants are growing in Home gardens all over the World and in developing countries nearly 80% of the people use them to treat various illnesses, diseases and also to improve their health conditions [ Rao et al;2006]. Traditional medicinal plants of Home gardens in Mizoram, Northeast India have great diversity and potential therapeutic applications of 135 plant species [ Sharma et al;2001]. Sixty two medicinal plant species used in different types of health treatment among the " Nath Community of Assam" India [ Sikdar and Dutta, 2008]. The rural Home gardens of Upper Assam, Northeast India reported a total of 96 medicinal plant species are used to treat 61 different ailments [Saikia and Khan, 2011]. Traditional Home garden system in Northeast India also found that the traditional medicinal use and value of various

plant species growing in the sites owned by the three different farming communities [Tangjang and Arunachalam, 2009]. The Home gardens of South Africa reported that traditional medicines remain an important health - care service among African Indigenous Cultures [Aworinde et al;2013]. Traditional Home garden plant species having medicinal use values with their use in treatment of various ailments [Millat - E- Mustafa et al;2001 and Maroyi, 2013]. Medicinal plants were documented to be an important plant group second only to high-value species in Sri Lanka and in Bangladesh [Millat – E- Mustafa et al;2002]. The Home gardens in Bukoba district of Tanzania contained plant species grown entirely for medicinal purposes to treat different ailments of human being [Rugalema et al;1994]. The role of Home gardens as main source of medicinal plants in different parts of the World [Saikia and Khan, 2011]. Catalonia, Iberian peninsula mountain regions are also potential of Home gardens as a source of medicinal plants [Agelet et al;2000]. Women’s role in traditional farming systems such as Home gardens in Bangladesh found that medicinal plants are an importantly gendered knowledge held by women, health care and diffusion of knowledge and making Women’s role important in male dominated societies [Akhter et al; 2010]. A perusal of Literature study on Akrofi et al;2008, Bhardwaj et al;2011, Dounias, 2010, Geldenhuys, 2007, Innerhofer and Bernhardt, 2011, Milow et al; 2010, Neulinger et al; 2013, Ninez, 1987, Srinivasa Prasadacharyulu, 2014, Wezel and Bender, 2003, WHO, 1993, Wiersum, 2006 and Zimik et al; 2012 showed that the Home gardens are the unique source of traditional medicinal plants with their Natural Medicines to treat different ailments, and also Home gardens contribute significantly to dietary diversity providing valuable potency nutritive food like Fruits, Vegetables and Leafy vegetables to human being. Hence the present work is carried out to focus the traditional medicinal value of “Antidiabetic Natural Medicines at House Garden” of Dr. Ch. Srinivasa Prasadacharyulu.

#### MATERIALS AND METHODS

In the present research work the selected material are [1] Selected Field area is Ch. Srinivasa Prasadacharyulu, House Garden and [2] Antidiabetic Natural Medicines [ADNM]. Ch. Srinivasa Prasadacharyulu House Garden is Located at Post Office Line of Rajendra Nagar, Guntakal, Anantapuramu [Dt], Andhra Pradesh, India. Repeated field studies were conducted at House Garden of Ch. Srinivasa Prasadacharyulu to identify antidiabetic medicinal plants with antidiabetic Natural Medicines during the period of July – 2014 to February – 2015.

In the present study 11 antidiabetic medicinal plants with 11 antidiabetic Natural Medicines were identified and recorded at Dr. Ch. Srinivasa Prasadacharyulu House Garden, Rajendra Nagar, Guntakal. The antidiabetic medicinal plants are identified with the help of Flora books [Pullaiah, and Chennaia, 1987]. The identified 11 antidiabetic medicinal plants are listed alphabetically with their scientific names followed by Family, Vernacular name, Antidiabetic Natural medicines and traditional therapy to treat Diabetes mellitus of Human being.

#### RESULTS AND DISCUSSION

In the present investigation the selected field area is Ch. Srinivasa Prasadacharyulu House Garden to detect Antidiabetic Natural Medicines of Antidiabetic medicinal plants. In the present research work repeated field studies were conducted at Ch. Srinivasa Prasadacharyulu House Garden during the period of July – 2014 to February – 2015 to detect Antidiabetic Natural Medicine of Antidiabetic Medicinal Plant. In the present research work a total of 11 antidiabetic medicinal plants with their 11 antidiabetic Natural Medicinal were identified at Ch. Srinivasa Prasadacharyulu House Garden [Table – 1]. The identified 11 antidiabetic medicinal plants with their 11 antidiabetic Natural Medicinal Plants are listed alphabetically with their scientific names, Family, Vernacular name, antidiabetic Natural Medicines and Traditional Therapy to treat diabetes mellitus [Table -1]. It is noticed that 11 Antidiabetic Natural Medicines with their concerned 11 traditional Therapies are used to treat Diabetes mellitus [Table -1]. It is evident from the research work that 3 parts of medicinal plants [Leaves, Seeds and Gel] has produced 11 antidiabetic Natural medicines to treat Diabetes mellitus [Table -2]. Among the reported 11 antidiabetic Natural Medicines, they are in the form of [1] Powder, [2] Juice, [3] Decoction, [4] Fresh Leaves and [5] Gel [Table-2]. It is further noticed that, among the reported different forms of 11 Antidiabetic Natural Medicines, Decoction of Leaves are dominant [3] followed by Powder of Leaves, Powder of Seeds and Fresh Leaves [2], Juice of Leaves and Gel [1] [Table – 2 & Fig-1 and 3]. It is again noticed that from the research work that the utilization pattern of traditional Therapies of 11 antidiabetic natural medicine to treat Diabetes mellitus among the concerned antidiabetic Natural Medicines, Decoction of Leaves are dominant part [3 and 28%], followed by Powder of Leaves [2 and 18%], Powder of Seeds [2 and 18%], Fresh Leaves [2 and 18%], Juice of Leaves [1 and 9%] and Gel [1 and 9%] [Table 2 and Fig-1,2 and 3].

**Table – 1: Antidiabetic Natural Medicines of Antidiabetic Medicinal Plants with their Family, Vernacular Name and Traditional Therapy to Treat Diabetes mellitus**

| S.No | Technical Name of Antidiabetic Medicinal Plant | Family        | Vernacular Name | Antidiabetic Natural Medicine | Traditional Therapy to treat Diabetes mellitus   |
|------|--|---------------|-----------------|-------------------------------|--|
| 1    | Achyranthes aspera L.                          | Amaranthaceae | Uttareni        | Powder of Leaves              | One Spoon Powder of Leaves with a Glass of Water orally taken Thrice a day regularly for a period of 60-days                 |
| 2    | Aloe vera [L.] Burm.f.                         | Liliaceae     | Kalabanda       | Gel                           | One Spoon Gel mixed with a Glass of Water thoroughly, taken orally twice a day regularly for a period of 6 weeks             |
| 3    | Azadirachta indica A. Juss                     | Meliaceae     | Veepa           | Juice of Leaves               | Fresh Juice of Leaves one spoon with water orally taken thrice a day for a period of 45 days                                 |
| 4    | Catharanthes roseus [L.] G. Don                | Apocynaceae   | Billaganneru    | Decoction of Leaves           | Hot water decoction of leaves 1 small glass orally taken twice a day for a period of 35 days                                 |
| 5    | Clitoria ternatea L.                           | Fabaceae      | Sankupushpam    | Decoction of Leaves           | Hot water decoction of leaves 25 ml orally taken thrice a day for a period of 45 days  |
| 6    | Coriandrum sativum L.                          | Umbelliferae  | Dhaniyalu       | Decoction of Leaves           | Hot water decoction of leaves 25 ml orally taken thrice a day for a period of 45 days  |
| 7    | Eclipta alba L.                                | Asteraceae    | Guntagalagara   | Powder of Leaves              | 1 spoon powder of leaves mixed thoroughly with a glass of water, orally taken thrice a day for a period of 60 days regularly |
| 8    | Momordica charantia L.                         | Cucurbitaceae | Kakara          | Powder of Seeds               | 1 spoon powder of seeds mixed thoroughly with a glass of water orally taken thrice a day regularly for a period of 60 days   |
| 9    | Moringa olifera Lam.                           | Moringaceae   | Munaga          | Powder of Seeds               | Half spoon powder of Seeds mixed thoroughly with a glass of water orally taken twice a day regularly for a period of 30 days |
| 10   | Murraya koenigii L.                            | Rutaceae      | Karivepaku      | Fresh leaves                  | Hand full fresh leaves eaten orally twice a day regularly for a period of 35 days.   |
| 11   | Ocimum sanctum L.                              | Lamiaceae     | Tulasi          | Fresh leaves                  | Hand full fresh leaves eaten orally twice a day regularly for a period of 35 days.   |

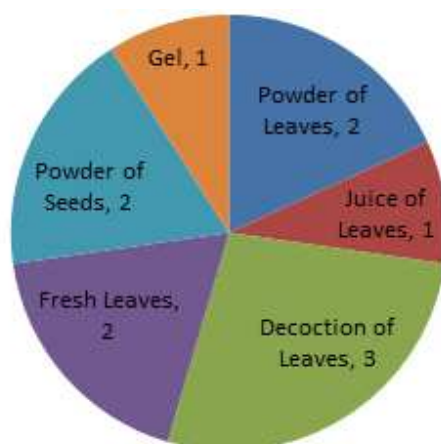
**Fig – 1: Total Number of Antidiabetic Natural Medicines to treat Diabetes mellitus**

Fig- 2: Percentage of Antidiabetic Natural Medicines to treat Diabetes mellitus

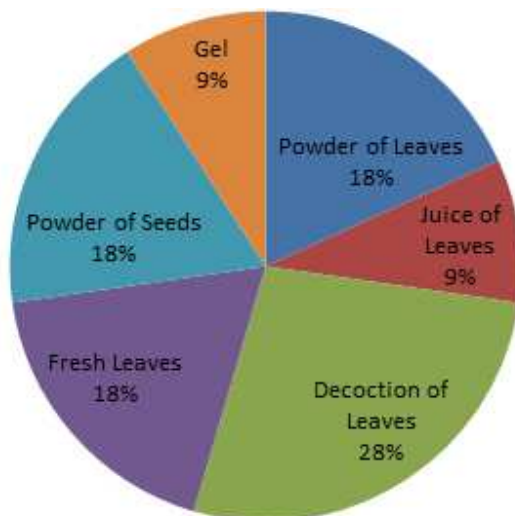
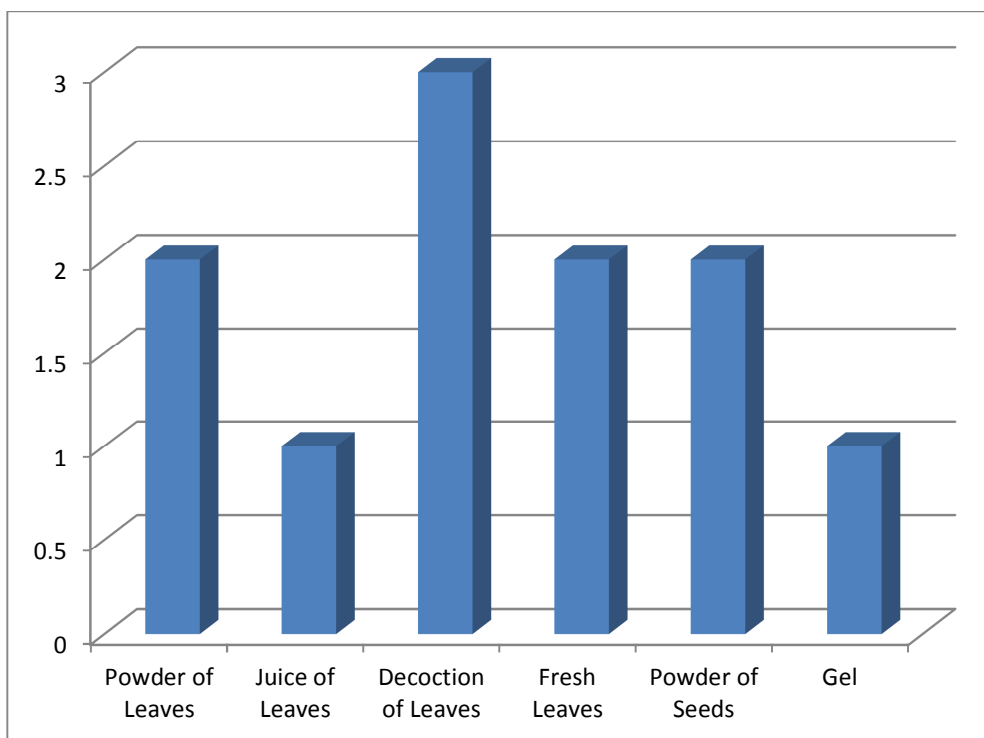


Table – 2: Total Number and Percentage of Antidiabetic Natural Medicines to treat Diabetes mellitus

| S.No | Antidiabetic Natural Medicine | Total Number | Percentage |
|------|-------------------------------|--------------|------------|
| 1    | Powder of Leaves              | 2            | 18%        |
| 2    | Juice of Leaves               | 1            | 9%         |
| 3    | Decoction of Leaves           | 3            | 28%        |
| 4    | Fresh Leaves                  | 2            | 18%        |
| 5    | Powder of Seeds               | 2            | 18%        |
| 6    | Gel                           | 1            | 9%         |

Fig 3 : Total Number of Antidiabetic Natural Medicines to treat Diabetes mellitus



## CONCLUSION

The result and findings of the present investigation is that the 11 Antidiabetic Natural Medicine [ADNM] are naturally and very easily available, benign and their traditional Therapy is very simple to treat Diabetes mellitus. Hence these 11 Antidabetic Natural Medicine are recommended to treat Diabetes mellitus at present and in future also.

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