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Our Plants as Doctors in Today's Animal Health

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Abstract
Svante Arrhenius, Swedish scientist predicted as early as 1896 that human activity would interfere with the way sun interferes with the earth- leading to global warming, climatic change and loss of biodiversity. Environmental change has affected most biological systems on our planet, mostly negatively. This is becoming an increased concern for the well-being and survival of many species. The effect of environment encompasses endocrine disruptions, sex ratio changes and decreased reproductive parameters, also include physiological, genotoxic, tetrogenic, immune suppressing effect, that lead to disease directly or increase of acquiring disease. Utilization of plants has been in vogue from time immemorial for various needs. Plants with medicinal properties enjoy the highest considerations in indigenous systems of medicine. Knowledge of the curative properties of specific plants is an accomplished art which is passed on from one generation to the next. Healthy animals are more likely to result in safer food supplies, higher production, reduced environmental impacts, improved animal well-being and most importantly reduced use of antibiotics. Plants are nature's doctors, so plants when used for correction of animal health problems, reduce the disease management expenditure by nearly 40%. More plant utilization with re cropping will bring down the negative impacts of the environmental issues. Very easily available neighbourhood wild plants happen to be solutions for great health problems of animals. Utilization of this plant treasure can work the wonder wand for a better environment free of Global environment concerns.

Keywords: *Animal Health; Medicinal Plants; Modernized Preparations; Plant Utilization; Product Formulations; Traditional Use.*

1. Introduction
Global environmental concerns twirl around Ozone layer depletion, Global warming and loss of diversity. Of this loss of diversity is our main concern [1]. This study tried to understand and present the importance of the two domains of diversity plants and animals. Their interactions are very crucial for human existence. Plants – oxygen generators and carbon dioxide sinks, have other roles to perform too. They not only act as food sources can also be considered as NATURE'S DOCTORS [2]. Our aim of study is to understand the proper management and utilization of the plant resources for the best benefit of animal kingdom, in terms of animal health and nutrition. For this study parts of Andhra Pradesh rich in plant diversity, animal husbandary and varied geographical conditions were selected [3]. These people used traditional plant use art for disease treatment to animals. Palasa in the north, Dasari Palem in the south, Cumbum in the west and Gannavaram in the east. These areas are specific for the culture of Sheep, Goat, Poultry and Cow & Buffalo respectively [4]. These places have an indigenous supply of plants with herbal activity.

2. Method
Survey and questionnaire method was followed.
All data collected in situ and verified with herbariums. The symptoms of disease are well recognised by the local people, they shared all the information they could with regard to kinds of plants used for different animal ailments. All this information is tabulated [5]. (Table 1) The herbal products of our company were selected and all the herbal ingredients were formulated under the area of treatment. (Table 2) Both tabulations were analysed thoroughly to see if the traditional knowledge of the curative properties of specific

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plants is accomplished and the art passed on from one generation to the next in the proper way keeping the scientific insight alive. Our traditional knowledge supported by technical scientific authentication with field trials and modernised preparations for proper utilization of the plants for a better environment and healthy animals. For this we listed out the different herbal plants used in our preparations along with their usage. Then went along with questionnaire to meet the local people and herbalists, to get info on the herb utilisation.

3. Analysis

- Adathoda can also be used to control Diarrhoea and Dysentery, since our use has been as laxative and antiviral [6].
- Allium's use is on par in both conditions. Showing that we are working close to the field.
- Azadirichtha – the miracle plant having many uses is easily available too.
- Cassia not only being a source of treatment for gastric and respiratory disorders, has a very important characteristic of being an antidote. Animals may ingest or be bitten by poisonous insects or snakes; this plant comes handy then.
- Acacia used by us as repellent and anti-infective can be used as a liver tonic too.
- Aegle not only being a medicine for ailments can be used as a haemopoietic substance.

Tables and Figures are presented center, as shown below and cited in the manuscript.

Table 1 Herbal Plants Used by Us for Study Along with the Ailments We Use Them to Cure

S.No	Herbal Plant	Ayurvedic Name	Family
1	Adathoda	Vasaka	Acanthaceae
2	Thumbergia	Tuma	Acanthaceae
3	Rouwolfia	Sarpagandha	Apocynaceae
4	Cassia	Markandika	Caesalpinaceae
5	Acalypha	Harita Manjari	Euphorbiaceae
6	Croton	Jamalgota	Euphorbiaceae
7	Phyllanthus	Bhurivalli	Euphorbiaceae
8	Ricinus	Eranda	Euphorbiaceae
9	Ocimum	Tuls	Labiate
10	Allium Sativum	Lehsun	Lilliaceae
11	Trichilia	Tricha	Maliaceae
12	Acacia	Khadira	Mimosaceae
13	Ficus	Vata	Moraceae
14	Emblica	Amla	Myrsinaceae
15	Psidium	Banubheej	Myrtaceae
16	Dolichos	Ballar	Papillonaceae
17	Indigofera	Nili	Papillonaceae
18	Tephrosia	Sarapunkha	Papillonaceae
19	Zanthoxylum	Tamburu	Rutaceae
20	Solanum	Makoi	Solanaceae
21	Ziziphus	Badri	Rhamnaceae
22	Yucca Schidigera	Yucca	Asparagaceae
23	Aegle	Bhel	Rutaceae

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24	Zingiber Officinale	Adarak	Zingiberaceae
25	Mangifera	Aam	Anacardiaceae
26	Punica Granatum	Dadima	Punicaceae
27	Cyperus Rotundus	Musta	Cyperaceae
28	Bombax Malabaricum	Kapok	Bombaceae
29	Abutilon	Atibala	Malvaceae
30	Chinchona	Kunain	Rubiaceae
31	Piper	Marichi	Piperaceae
32	Hibiscus	Karkodi	Malvaceae
33	Withania	Aswagandha	Solanaceae
34	Sida	Bala	Malvaceae
35	Terminalia	Arjuna	Combretaceae
36	Tinospora	Guruchi	Menispermaceae
37	Scutellaria	Kattu Tulasi	Lamiaceae
38	Eclipta Alba	Bhringraj	Asteraceae
39	Curcuma Longa	Haldi	Zingiberaceae
40	Glycyrrhiza	Yasthimadhu	Fabaceae
41	Swertia	Chirata	Gentianaceae
42	Azadirachtha	Arishtha	Meliaceae
Of The 100 And Odd Herbs Used, These Were Selected on The Qualitative And Quantitative Basis			

Table 2. Analysis of the Questionaire from The Data Taken from The Local People and Herbalists of Palasa, Dasari Palem, Cumbum and Gann avaram

S.No	Herb/Plant	Vernacular /Telugu Name	Ailments Controlled	Method Of Application
1	Allium Sp.	Ulli, Velullli	Anemia, Removal of ecto parasites, Anti septic, Anti Bloating, Vascular Disorders, Ear Infections	Bulbs grinded mixed with mustard oil, made into a paste, made to swallow or applied on the body parts
2	Azadirachta indica	Vepa	To heal wounds, Virucidal, General well-being, to clean the GI tract	Bark or leaves made into paste or powder applied externally or given to swallow internally
3	Adhthoda vasica	Addasaramu	To control diarrhoea and dysentry mainly.	Leaf juice thrice daily for about a week
4	Butea	Kinsukamu	Dysurea, Anti paralytic, Anti parasitic	Flower decoction for about a week
5	Calotropis	Jilledu	Easy delivery, Immunity enhancer, Wound healer	Leaf applied like band aid on wounds, flower paste mixed with jaggery
6	Cassia	Lavangapatta	Control indigestion, Respiratory disorders and Anti viral	Fruit paste given on empty stomach, to control indigestion, bloating other viral infections controlled

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7	Bambusa	Veduru	Easy delivery, Indigestion, B12 source for General well-being	Leaves are give with other feed. works as laxative, controls diarrhoea and for easy delivery
8	Acacia	Anachandra	Control jaundice and other liver ailments	Grounded, pasted flower given on empty stomach to cure jaundice and for good liver functioning
9	Asparagus	Abhiravu	Anti septic, Anti Diarrhoeal and to control Arthritis	Root powder cleanses the tract, anti diarrhoeal, makes the bones strong
10	Aegle	Maredu	Anti Amoebic, Anti protozoan, prevents sun burns	Paste acts as sun screen and anti amoebic when taken internally
11	Argemone	Brahmadandi	Control of foot infection and Rheumatism	Juice and paste of leaves and fruits, prevents feet infection, makes bones strong, relieves pain.

4. Results and Discussion

- The plant species selected were able to combat more than 30 kinds of illnesses.
- The illnesses were mostly related to microbial, respiratory, parasitic and gut.
- Apart from being therapeutic in nature these plants also substituted different kinds of mineral and protein constituent to the animals.
- In most cases the part of the plant used the most was the leaf followed by the bark. For this the plant need not be killed, pruning could bring back most of the plants.
- The uniqueness of these plants is, even at high dosage or continuous usage, there is no toxicity and animals don't show any resistance like in the case of antibiotic use.
- The most attractive observation was that the local, traditional usage of the herbal plants was similar to where and why we used the plants in our production.
- Happy that this study could embark upon the fact that the wild plants around us trampled and crushed by us are unknowingly saving biodiversity.
- The synergistic blend of different herbal plants in the right combinations, encapsulated the animal kingdom in good health and greater production.
- Satisfaction is a rating, so here we are not just satisfied but happy that the plant wealth is being properly and efficiently used by us. The replenishment of the plants is happening naturally, to say nature is taking self-care.
- Loyalty is a brand, with this we are assuring that the herbal plants used by us, with modernisation, still carry the traditional goodness and wisdom of nature.

Conclusion

It is utilisation of plants for a safe healthy good bio diversity, in the most appropriate way, an apt answer to meet the Global environmental concerns. Plants act as natural doctors for the cure of more than 100 kinds of ailments in animals. During our study we observed that the usage of these plants in animal health and nutrition brought down the disease management expenses by nearly 40% and the animals themselves were priced better due to their enhanced quality. A welcome note to end with.

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