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Review Article

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STATUS OF NATURAL DYE YEILDING PLANTS OF CHURU DISTRICT

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ABSTRACT

The perfectly acceptable therapists of Rajasthan's Shekhawati area have exemplaryknowledge about the medicinal and cautious figures of plants that grow through themselves.^[10] Distinct and unique native species throughout the numerous localities of Churu being Dye's important shining beacon against certain diseases. A subset of many of these plant species also found application of regular contrast preparation. Standard shades are dyes with a few variations in fabrics, lacquers, individuals with dementia and so much more. A investigation was performed on the usage of color generating plants in culture and in addition their medicinal benefit. Researchers also differentiated

plantations hat achieve color as Woodfordia furticosa Kurz (Lythraceae), Morinda citrifolia Linn. (Rubiaceae), Butea monosperma (Fabaceae), Butea superba Roxb. ExWilld. (Fabaceae), Carthamus tinctorius L.Compositae), Ventilago spp. Willd. (Rhamnaceae), Nyctanthes arbor-tristis Linn (Oleaceae), Tectona grandis Linn.f (Verbenaceae). What is expressed throughout the constituency of Churu. The neighboring immigrant structures use the coloring provisions of the plants for numerous local purposes. These unique plants which generate pigment provide potential medicinal and organizational characteristics. Furthermore it was found that the usual colors are not harmful and eco-friendly. Other than that, it includes worrying that aboriginal knowledge regarding selection, processing and using Technique and the better practicable usage of standard colors has now deteriorated owing to the easy usability of imported colors that really are technically less costly. It would be very crucial that correct paperwork and defensive measurements be adopted to protect and defend all such signature color producing plants or we would inevitably for eternal damnation loss valuable data in nature. The investigation discovers that certain plants yielding financially and emotionally meaningful color should also be significantly influenced for biological diversity just like cultural and traditional knowledge.

KEYWORDS: Natural dyes, synthetic dyes, traditional knowledge, biodiversity conservation, Ethnic communities.

INTRODUCTION

Timberland occupies even almost 37,638 km2 of the farmland of Rajasthan, for obvious reasons 11 percent. This forest contains approximately 7 percent of degraded and uncovered timberlands. Rajasthan's bone-dry region is fortunately competent with 628 organisms providing a position of 352 species of the genus and 87 communities. Approximately one-fourth of the Indian Thar Desert's utter plants are important for organisms and domestic creatures' governmental assisting in fruit, heat, water, medicine, and various necessities. The erratic seismic activity and powerless spiritual discernment including its landscape have dominated the effect on the indonesian wasteland organic matter.

To grasp the concepts of bold colours and plants yielding light, there have been four fundamental issues that need to be addressed: why would anyone even some plants will yield colours. How does the plant benefit from receiving colours. What really is the fundamental clearing for antioxidant activities Answers to the original four questions should be checked by four additional inquiries, e.g. 'Why do plantations get such large quantities of specific hues' and 'Why do these represent the plant' Green in certain leaves certainly is perhaps the most common coloring in plants.

The environmentally friendly shade chlorophyll in the leaf surface helps absorb the energy of the light and turns through it into the potency of the material, which could then be lost or destroyed and used by the plant as essential nutrients. Bright colors in wildflowers are progressions that draw in glitches and numerous lifeforms and therefore also improve soil quality and therefore reproduce plants. A lot of trees and shrubs provide genius sustainably grown goods that lure in predators to consume them, thereby unintentionally scattering the seeds of the plant as well. Researchers concur that numerous combinations can effectively protect plants against diseases. Given everything they believe of the work of a handful of the several plant shadows, the role of many other seedling shades remains a great mystery for us to present. Especially considering the fact that plants demonstrate a broad variety of shades of orange, it is not practical to use such wavelengths as colours. Others don't split up in mud, everyone else on nanostructures can't be absorbed by the body while some of the shimmer when cleaned or exposed to air or sun. It remains a mystery, wherefore plantations compensate everyone with vibrant colors. India has a vast biological diversity and seems to be not even one of the twelve decreasing over time countries in the developed world, but also one of the eight main focal points for beginning and increasing neutered taxa. It does have upwards of 490,000 plant varieties, of which almost 17,500 are flowering plants; over than 400 are educated harvested organisms, and whose wild members of the family were almost equal in size. Distinctive feature wavelengths are well treated state, for example, turmeric, the much more bright of naturally occurring yellow colors is an excellent sterile that resurrects the skin, whereas indigo provides a smoother texture.

Over the decades, colors were being used to shade textured materials, sequences, cashmere sweaters, and certain other self - adhesive things. Colors are supposed to apply to material properties as a response or as a duct tape analogously as production companies additional 0.5 to layering food items whether to disguise that the very first shade or help increase about their shades to make them more attractive to buyers. Shading is recognised as a common law concerning material possessions that consumers are predominantly concerned with than some of the other word. The need for vivid materials spurred the discovery of designed colors and the recruitment of professionals in dyestuffs and formulations that create lasting shades of green in substances. Are some of the most part, coloring for the goods sector arises through colours.

MATERIALS AND METHODS

Region of Analysis

Churu seems to be the destination in Rajasthan's Shekhwati region. Churu region is arranged in the center bit of north-eastern Rajasthan between $27^{0}24'$ N to $29^{0}00'$ N and $73^{0}51'$ E to $75^{0}41'$ E longitude, having an area of approximately 13858 km². The area is a fragment including its Indian Thar Desert, set 400 metres above sea level. The geographic location is noteworthy for vast variations of circadian and sporadic temperatures varying from –200 C in winter to 49.80 C in summer season through shifting sand elevations, erratic and scant atmospheric conditions, and strong wind speeds, with bristly and powerless foliage. The soil texture and glorious sunshine are indeed the 2 main signature holdings that are bountifully widely available at that same landscape and therefore are essential for advancing sandy plant life with unpredictable restore property. Typically the entities in culture are acquainted with those kind of resurrection and ascension all around.^[7,9]

Strategies

Two strategies were used to record these first few color producing plants. The first one was by conferences, reachings, discussions and consultations in the NWS area including natives, people preliminary phytochemical analysis, vaids, peugeot, holy spirits, homeopaths and numerous professionals. Other one was through providing advice to both the publications. Two strategies were used to record these first few color producing plants. The first one was by conferences, reachings, discussions and consultations in the NWS area including natives, people preliminary phytochemical analysis, vaids, peugeot, holy spirits, homeopaths and numerous professionals. Other one was through providing advice to both the publications Additionally, knowledge in neighboring utilization of local was gathered via survey.

The examples collected were routinely identified with either the aid of the Flora of India^[22], Flora of Indian Desert^[1], Flora of North EastRajasthan^[21], Flora of Upper Gangetic Plain and the Adjacent Siwalic and Sub Himalaya Tract^[4], and Flowers of Himalaya.^[18] The check and authentification of gathered information were made in the light of standard writing.^[6,7, 15,11, 3] A detailed breakdown of normally yielding plants in colour is represented in the table no. 1 and family wise presentation of dye yielding plants in figure no. 1.

| S.No. | Botanical-Name | Local-Name | Families |
|-------|-----------------------|------------------|-------------------|
| 1. | Adhatoda zeylanica | Arusha | Acanthaceae |
| | | | (Acanthus family) |
| 2. | Barleria acanthoides | Pink Barleria | Acanthaceae |
| | | | (Acanthus family) |
| 3. | Barleria prionitis | Yellow nail dye | Acanthaceae |
| | | | (Acanthus family) |
| 4. | Peristophae tinctoria | Showy foldwing | Acanthaceae |
| | | | (Acanthus family) |
| 5. | Amaranthus hybridus | Spiny amaranth | Amaranthaceae |
| | | | (Amaranth family) |
| 6. | Amaranthus spinosus | Prickly amaranth | Amaranthaceae |
| | | | (Amaranth family) |
| 7. | Amaranthus viridis | Slender amaranth | Amaranthaceae |
| | | | (Amaranth family) |

Table No. 1: List of dye yielding plants of churu district.

| | a.1 | | Amaranthaceae |
|-----|-------------------------|----------------------|---------------------------------|
| 8. | Celosia argentea | Quail grass | (Amaranth family) |
| | | 01 1 | Apocynaceae |
| 9. | Nerium oleander | Oleander | (Dogbane family) |
| 10 | | T 1 / | Apocynaceae |
| 10. | Plumeria rubra | Temple tree | (Dogbane family) |
| 11 | Wai-latin timetanin | Dala indiaa | Apocynaceae |
| 11. | wrightia tinctoria | Pala indigo | (Dogbane family) |
| 12. | Tagetes erecta | Marigold | Asteraceae (Sunflower family) |
| 13 | Basella rubra | Indian spinach | Basellaceae |
| 15. | | mulan spinach | (Madeiravine family) |
| 14 | Riva orellana | Annatto | Bixaceae |
| 17. | Βιλά υτεπαπά | | (Achiote family) |
| 15 | Bombax ceiba | Red silk cotton tree | Bombacaceae |
| | 2011/04/1 00/04 | | (Kapok family) |
| 16. | Cordia dichotoma | Goonda | Boraginaceae |
| - | | | (Forget-me-not family) |
| 17. | Cordia macleodii | Hadang | Boraginaceae |
| | | | (Forget-me-not family) |
| 18. | Cordia obliqua | Lasora | (Eorget me not family) |
| | Casuarina equisetifolia | Casuarina tree | (Torget-Ine-not family) |
| 19. | | | (Beef-wood family) |
| | | | Combrataceae |
| 20. | Terminalia arjuna | Arjun Tree | (White mangrove family) |
| 21 | | TT 1 | Combrataceae |
| 21. | Terminalia chabula | Harad | (White mangrove family) |
| 22 | Tomminglig balloning | Dahirda | Combrataceae |
| ۲۲. | Terminalia ballerica | Daminua | (White mangrove family) |
| 23 | Terminalia alata | Indian laural | Combrataceae |
| | | | (White mangrove family) |
| 24. | Commelina forskaolii | Davflower | Commelinaceae |
| | | | (White mangrove family) |
| 25. | Commelina maculata | Spotted Dayflower | Commelinaceae |
| | | | (while mangrove family) |
| 26. | Phyllanthus emblica | Indian gooseberry | (Spurge family) |
| | | | (Spurge ranny) Funhorbiaceae |
| 27. | Mallotus philippensis | Kamala tree | (Spurge family) |
| | | | Fabaceae |
| 28. | Acacia catechu | Black catechu | (Legume family) |
| 20 | | XX71 · 1 1 1 | Fabaceae |
| 29. | Acacia leucophloea | white babul | (Legume family) |
| 20 | Acadia vilotica | Black habool | Fabaceae |
| 50. | | DIACK DADOOI | (Legume family) |
| 31 | Alhizia lehheck | Lehhek tree | Fabaceae |
| 51. | | | (Legume family) |
| 32 | Bauhinia nurnurea | Purple-Bauhinia | Fabaceae |
| 52. | Saanna parparea | | (Legume family) |

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| 33. | Bauhinia variegata | Variegated-Bauhinia | Fabaceae (Legume family) |
|-----|-----------------------|---------------------|------------------------------------|
| 34. | Butea monosperma | Flame of the forest | Fabaceae (Legume family) |
| 35. | Butea superba | Palas wel | Fabaceae (Legume family) |
| 36. | Caesalpinia sappan | Sappan wood | Fabaceae (Legume family) |
| 37. | Carthamus tinctorius | Safflower | Fabaceae (Legume family) |
| 38. | Cassia fistula | Goldem shower | Fabaceae (Legume family) |
| 39. | Cassia obtusifolia | Sicklepod | Fabaceae (Legume family) |
| 40. | Cassia auriculata | Styptic weed | Fabaceae (Legume family) |
| 41. | Cassia siemia | Kassod | Fabaceae (Legume family) |
| 42. | Cassia tora | Stinging cassia | Fabaceae (Legume family) |
| 43. | Clitoria ternatea | Clitoria | Fabaceae (Legume family) |
| 44. | Dalbergia sissoo | Shisham | Fabaceae (Legume family) |
| 45. | Dalbergia latifolia | Kala Shisham | Fabaceae (Legume family) |
| 46. | Delonix regia | Gul Mohur | Fabaceae (Legume family) |
| 47. | Indigofera tinctoria | Indigo | Fabaceae (Legume family) |
| 48. | Indigofera linnaei | Leel | Fabaceae (Legume family) |
| 49. | Tamarindus indica | Amli | Fabaceae (Legume family) |
| 50. | Pterocarpus marsupium | Bastard teak | Fabaceae (Legume family) |
| 51. | Aloe barbedence | Aloe | Liliaceae (Lily family) |
| 52. | Lawsonia inermis | Henna plant | Lythraceae (Loosestrife family) |
| 53. | Woodfordia fruticosa | Fire flame bush | Lythraceae (Loosestrife family) |
| 54. | Abutilon indicum | Indian mallow | Malvaceae (Mallow family) |
| 55. | Alcea rosea | Hollyhock | Malvaceae (Mallow family) |
| 56. | Hibiscus caesius | Chinese rose | Malvaceae (Mallow family) |
| 57. | Azadirachta indica | Neem | Meliaceae |

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| | | | ((Mahogany family)) |
|------------|---|--------------------|---------------------------|
| 58. | ~ | | Menispermaceae |
| | Cocculus hirsutus | Ink berry | (Moonseed family) |
| 59. | C 1 11 | וית | Menispermaceae |
| | Cocculus pendulus | Pilwan | (Moonseed family) |
| <i>c</i> 0 | Ficus religiosa | Peepal tree | Moraceae |
| 60. | | | (Mulberry family) |
| (1 | Moringa oleifera | Drumstick tree | Moringaceae |
| 01. | | | (Horseradish tree family) |
| () | Eucalyptus tereticornis | Forest Red Gum | Myrtaceae |
| 02. | | | (Myrtle family) |
| (2) | Eucalyptus globulus | Blue gum | Myrtaceae |
| 03. | | | (Myrtle family) |
| 64 | C | т | Myrtaceae |
| 04. | Syzygium cumini | Jamun | (Myrtle family) |
| 65 | Rougainvillag alabua | Dougoinvilloo | Nyctaginaceae |
| 03. | bougainvillea glabra | Douganivinea | (Four o'clock family) |
| 66 | Nuctanthas arbor tristis | Hor Singer | Nyctaginaceae |
| 00. | Nyclanines arbor-irisiis | nai Siligai | (Four o'clock family) |
| 67 | Ligustrum robustum | Wild Privet | Oliaceae |
| 07. | Ligustrum robustum | | (Olive family) |
| 68 | Rumex dentatus | Ambayati | Polygonaceae |
| 00. | | Allibavati | (Smartweed family) |
| 60 | Portulaca oleracea | Common nurselane | Portulacaceae |
| 09. | | | (Purselane family) |
| 70 | Ziziphus mauritiana | Jujuha traa | Rhamnaceae |
| 70. | | | (Buckthorn family) |
| 71 | Ixora coccinea | Needle flower | Rubiaceae |
| /1. | | | (Bedstraw family) |
| 72 | Morinda citrifolia | Indian Mulberry | Rubiaceae |
| 72. | | | (Bedstraw family) |
| 73 | Rubia cordifolia | Indian madder | Rubiaceae |
| 13. | | manan madder | (Bedstraw family) |
| 74 | Aegle marmelos | Beel tree | Rutaceae |
| , | 1.0510 1101110105 | Deer uice | (Bedstraw family) |
| 75 | Madhuca longifolia | Indian Butter tree | Sapotaceae |
| | | Indian Datter 100 | (Sapodilla family) |
| 76 | Datura stramonium | Datura | Solanaceae |
| / 01 | | Duturu | (Nightshade family) |
| 77. | Datura metel | Thorn apple | Solanaceae |
| | ~ | - norm appro | (Nightshade family) |
| 78. | Solanum virginianum | Bhurangini | Solanaceae |
| | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | 2.10101.9.11 | (Nightshade family) |
| 79. | Solanum nigrum | Makoi | Solanaceae |
| | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | | (Nightshade family) |
| 80. | Tectona grandis | Teak | Verbenaceae |
| 00. | | | (Verbana family) |
| 81 | Alpinia galangal | Greater galang | Zingiberaceae |
| 01. | Inpinia Salangai | Sieuter guiung | (Ginger familo |

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Figure No. 1 – Family wise presentation of dye yielding plants of churu district.

CONCLUSION

The emphasis on environmental issues around the planet has revived the passion for signature colors.^[12,17,19] Straight now, a large number of color plants are being evaluated by means of their suitability for production growth, yield and decoration. Correspondingly, since 80 percent of the global people use plant-based drugs, that some of these plants are of immense rejuvenating benefit.

The analysis reveals that only the district of Churu is rich in plants yielding from Pigment and contains a broad range of individual debilitating conditions. Just several plants are of essential value for different kinds of illnesses. This area of the country in Rajasthan has major plant rich regions. The plants have been found as references of Dyeing as well as being used mostly for milk, nutrition, esophagus and replenishes, essential oil, homeopathic remedies, soggy oil, salad dressings, flavours, and so on, these valuable restored and inexpensive trees and shrubs are in desperate need of preservation.

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