

Generation of QR code to the documented plants of the College Campus (24/04/2021)

Context : The Department has adopted to identify plants documented plant species present in the College Campus by generating QR Codes are barcodes that can be read by mobile phone (smartphone) cameras. A QR Code is Unique to a webpage. All plant pages have their own Unique Code. Anyone with a Smart phone can use a QR code Scanning app to Scan the code and see the Scientific name, family & Medicinal Uses of the plants.

Objectives :

- To display the plant information to Quick Response Code
- To visualize plant information through Quick Response Code.
- To Know Scientific and common name, family & Medicinal Uses of the plants.

Implementation : Department of Botany have identified some students of B.Sc life sciences and assigned to do study project on "A Study and Documentation of Flora Existing in the Campus of Govt. Degree College Khairatabad and documentation to the existing flora with the help of Dr. J. Swamy Scientist B from BSI (Botanical Survey of India) Deccan regional centre in the year 2017-18 on 9/11/2017 and submitted project on 24/11/2017 QR codes are generated for those plants

Observation : Our College principal Dr. DSR Rajender Singh says that people ^{are} often curious to know about a plant that is in front of them but may not know what to look for. even if they were to do a Google search Dept. of Botany GDC Khairatabad proposed tagging trees in the college campus with QR codes.

We see QR codes on product packaging which is used to find out more about the product.

QR codes are generated and display them on plants. Anyone with a Smartphone can download a QR code Scanning app. Scan the code and see the scientific name and common name, family, medicinal uses of the plants.

Principal of our college Dr. D.S.R. Rajender Singh and Head of the Department B. Sofia Rani and faculty of Botany & Microbiology Dr. P. Vijaya, Dr. K. Sarojini Chakravarthy, P. Archana Mary involved in QR code tagging to plants. Other faculty members of GDCK also involved and participated in this programme.

B. Sofia Rani

Generation of QR codes - list of plants

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1. *Alstonia scholaris* (L.) - Apocynaceae ✓
2. *Azadirachta indica* A. Juss - Meliaceae ✓
3. *Mangifera indica* L. - Anacardiaceae ✓ 2002
4. *Ficus benghalensis* - Moraceae ✓ 2018
5. *Annona squamosa* L. - Annonaceae ✓ 2020
6. *Polyalthia longifolia* (Sonn.) - Annonaceae ✓
7. *Ficus religiosa* L. - Moraceae ✓
8. *Jacaranda mimosifolia* - Bignoniaceae ✓
9. *Peltophorum pterocarpum* - Caesalpiniaceae ✓
10. *Spathodea campanulata* - Bignoniaceae ✓
11. *Parkia biglandulosa* - Mimosaaceae ✓
12. *Sterculia foetida* - Malvaceae ✓
13. *Phyllanthus emblica* (L.) - Euphorbiaceae ✓ 2008
14. *Ficus racemosa* - Moraceae ✓
15. *Dalbergia sissoo* - Papilionaceae ✓
16. *Aloe vera* - Asphodelaceae ✓
17. *Bryophyllum pinnatum* - Crassulaceae ✓
18. *Catharanthus roseus* - Apocynaceae ✓
19. *Cissus quadrangularis* - Vitaceae ✓
20. *Scaevola taccada* - Phyllanthaceae ✓
21. *Psidium guajava* - Myrtaceae - Guava (2020) ✓ - Javapaly
22. ~~Scaevola~~ *Syzygium cumini* - Myrtaceae - Neredu
23. *Pithecellobium dulce* (Roxb) Benth - Fabaceae - Seemachinthe
24. *Ficus religiosa* - Moraceae - Ravi Sacred fig tree ✓
25. *Ixora coccinea* - Rubiaceae - Nooruvarahalu
26. *Adenium obesum* - Apocynaceae -
27. *Bougainvillea spectabilis* - Nyctaginaceae ✓ - Kagithalapuvvu
28. *Nerium Oleander* - Apocynaceae - ganneru
29. *Canna indica* - Cannaceae - Guruvinda
30. ~~*Bryophyllum pinnatum* - Crassulaceae - Seemajemudu~~
31. *Asparagus racemosus* - Asparagaceae - Sathavaru
32. *Murraya Koenigii* - Rutaceae - Karivepaku ✓
33. *Tinospora cordifolia* - Menispermaceae - Tippateega

34. Euphorbia hirta - Euphorbiaceae
35. Indigofera astragalina - Papilionaceae
36. Roystonea regia - Arecaceae
37. Albizia lebeck (L) Benth - Fabaceae ✓
- 38 ✓ Bauhinia purpurea L - Fabaceae ✓
39. Dalbergia sisso - Fabaceae
- * 40. Caesalpinia pulcherrima - Caesalpinaceae
41. Delonix regia - Fabaceae (Subfamily: Caesalpinaceae)
- 42 X ~~Bauhinia purpurea - Fabaceae~~
43. Jasminum officinale - Oleaceae
44. Justicia ^{simpae} adhatoda (Adhatoda vasica) - Acanthaceae
45. Citrus limon - Rutaceae
46. Hibiscus rosa sinensis ✓
47. Helianthus annuus - Asteraceae
48. Acalypha indica -
49. Thuja occidentalis L. - Cupressaceae
50. Tamarindus indica -
51. Oak tree (Quercus robur) - Fagaceae
52. Caesalpinia sps.
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Generation of QR codes – list of plants

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|--|--------------------|-----------------|
| 1. <i>Alstonia scholaris</i> (L) | - | Apocynaceae |
| 2. <i>Azadirachta indica</i> A. Juss | - | Meliaceae |
| 3. <i>Mangifera indica</i> L. | - | Anacardiaceae |
| 4. <i>Ficus benghalensis</i> | - | Moraceae |
| 5. <i>Annona squamosa</i> L. | - | Annonaceae |
| 6. <i>Polyalthia longifolia</i> (sonn.) | - | Annonaceae |
| 7. <i>Ficus religiosa</i> L. | - | Moraceae |
| 8. <i>Jacaranda mimosifolia</i> | - | Bignoniaceae |
| 9. <i>Pettaphorum pterocarpum</i> | - | Caesalpinaceae |
| 10. <i>Spathodea companulata</i> | - | Bignoniaceae |
| 11. <i>Parika biglandulosa</i> | - | Mimosaceae |
| 12. <i>Sterculia foetida</i> | - | Malvaceae |
| 13. <i>Phyllanthus emblica</i> | - | Euphorbiaceae |
| 14. <i>Ficus racemosa</i> | - | Moraceae |
| 15. <i>Palbergia sissoo</i> | - | Papilionaceae |
| 16. <i>Aloevera</i> | - | Asphodelaceae |
| 17. <i>Bryophyllum pinnatum</i> | - | Crassulaceae |
| 18. <i>Catharanthus roseus</i> | - | Apocynaceae |
| 19. <i>Cissus quadrangularis</i> | - | Vitaceae |
| 20. <i>Sauropus androgynus</i> | - | Phyllanthaceae |
| 21. <i>Psidium guava</i> Guava | | |
| 22. - | | Myrtaceae |
| 23. <i>Syzygium cumini</i> | - Myrtaceae - | Neredu |
| 24. <i>Pithecollobium dulce</i> (Roxb) Benth | - Fabaceae - | seema chintha |
| 25. <i>Ficus religiosa</i> | - Moraceae - | Ravi |
| 26. <i>Ixora coccinea</i> | | - Rubiaceae - |
| Nooravarahalu | | |
| 27. <i>Adenium obesum</i> | - | Apocynaceae |
| 28. <i>Bougainvillea spectabilis</i> | - Nyctaginaceae - | Kagithala puvvu |
| 29. <i>Nerium oleander</i> | - Apocynaceae - | Ganneru |
| 30. <i>Canna indica</i> | - Cannaceae - | Guruvinda |
| 31. <i>Bryophyllum pinnatum</i> | - Crassulaceae - | Seemajemudu |
| 32. <i>Asparagus racemosus</i> | - Asparagaceae - | Sathaveru |
| 33. <i>Murraya koenighi</i> | - Rutaceae - | Karivepaku |
| 34. <i>Timospora cordifolia</i> | - Menispermaceae - | Tippateega |
| 35. <i>Euphorbia hirta</i> | - | Euphorbiaceae |
| 36. <i>Indigofera astragalina</i> | - | Papilionaceae |
| 37. <i>Roystonea regia</i> | - | Arecaceae |
| 38. <i>Alvizia lebeck</i> (L) Benth | - | Fabaceae |