

# Fodder resources of Kasaragod district, Kerala, India

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## SUMMARY

Rural people of Kasaragod district mainly depend on the natural plant resources to feed their cattle. A total of 245 angiosperms are being used as fodder. The graminaceous and fabaceous taxa are represented by the largest numbers. 224 species were found wild in nature, whereas the rest were cultivated. This paper communicates botanical identity, family, local name, habit and morphology of useful part of these plants.

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Kasaragod district borders North – Eastern side of the state of Kerala, situated between 11° 18' and 12° 48' N latitude and 74° 52' and 75° 26' E longitude. Topographically it consists of a narrow coastal belt, undulating midland and mountainous highlands of Western Ghats, harboring coastal scrub forests to evergreen forests. Live stock and other domestic animals are part of village folk since time immemorial. The rural people utilize a great variety of green plants, the most suitable natural food to feed their domesticated animals. In Southern peninsular India, Shetty *et al.* (2002) elucidated the fodder resources of Udupi and Dakshina Kannada districts of Karnataka, while Patil and Patil (2007) that of Nasik District of Maharashtra. Scrutiny of literature revealed that no work has been done on this aspect from the state of Kerala. Therefore, this paper attempts to communicate the information on fodder resources gathered from rural people of Kasaragod district, Kerala.

## MATERIALS AND METHODS

Extensive ethno botanical and floristic surveys were carried out throughout the Kasaragod district from March 2007 to January 2010. Information regarding different fodder resources, their properties, availability, local

names, useful part and other details were collected from rural people, cattle farmers and elder people through personal interview. The collected data were authenticated by cross check and repeated attempts. These plants were collected and identified using the regional floras (Hooker, 1872 – 1897; Gamble and Fischer, 1915 – 1936; Manilal and Sivarajan, 1982; Mathew, 1984; Ramachandran and Nair, 1988; Gopalakrishna Bhat, 2003; Anil Kumar *et al.*, 2005). Voucher specimens were deposited at the SSC herbaria.

## RESULTS AND DISCUSSION

During present investigation, a total of 245 angiosperms belonging to 156 genera and 40 families were found in use as fodder for domestic animals, especially cattle. The botanical identity, family, local name, habit and morphology of useful part of these fodder resources are given in Table 1. Among these, dicots comprised of 32 families, 103 genera and 165 species, while monocots 8 families, 53 genera and 80 species. Critical study makes it clear that graminaceous (56 members) and fabaceous (32 members) taxa are the largest groups of plants used for this purpose, followed by 17 Asteraceae, 16 Acanthaceae and 15 Rubiaceae members. Out of these, 162 species were herbs, 41 trees, 32 shrubs and the rest climbers. Among the different plant parts used, whole plants showed greater diversity (162 species) followed by 63 tender shoots, 18 leaves, pseudo bulb of *Bulbophyllum sterile* (Lam.) Suresh and pod of *Samanea saman* (Jacq.) Merr. Twenty one species (asterisked in the Table 1) were found under cultivation.

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**Table 1 : Fodder resources of Kasaragod district, Kerala**

Sr. No.	Botanical name	Family	Vernacular name	Habit	Parts used
1.	<i>Acroceras munroanum</i> (Balansa) Henr.	Poaceae	-	Perennial grass	Whole plant
2.	<i>Adenanthera pavonina</i> L.	Mimosaceae	<i>Manjatti</i>	Large tree	Leaves and young shoot
3.	<i>Aerva lanata</i> (L.) Juss. ex Schult	Amaranthaceae	<i>Pashana bedhi</i>	Decumbent herb	Whole plant
4.	<i>Ageratum conyzoides</i> L.	Asteraceae	<i>Kaadu tulasi</i>	Erect herb	Whole plant
5.	<i>Albizia chinensis</i> (Osb.) Merr.	Mimosaceae	<i>Kalbaage</i>	Large tree	Leaves
6.	* <i>Albizia lebbeck</i> (L.) Benth.	Mimosaceae	<i>Bage</i>	Large tree	Leaves
7.	<i>Albizia odoratissima</i> (L.f.) Benth.	Mimosaceae	<i>Kaadubaage</i>	Large tree	Leaves
8.	* <i>Albizia procera</i> (Roxb.) Benth.	Mimosaceae	<i>Bilibaage</i>	Large tree	Leaves
9.	<i>Alloteropsis cimicina</i> (L.) Stapf.	Poaceae	-	Tufted grass	Whole plant
10.	<i>Alternanthera bettzickiana</i> (Regel) Voss.	Amaranthaceae	-	Erect herb	Whole plant
11.	<i>Alternanthera brasiliana</i> (L.) Kuntze	Amaranthaceae	<i>Kempu croton</i>	Erect herb	Whole plant
12.	<i>Alternanthera sessilis</i> (L.) R.Br. ex DC.	Amaranthaceae	<i>Honagane</i>	Diffuse herb	Whole plant
13.	<i>Alternanthera tenella</i> Colla.	Amaranthaceae	<i>Matsyakshi</i>	Prostrate herb	Whole plant
14.	<i>Alysicarpus bupleurifolius</i> (L.) DC.	Papilionaceae	-	Diffuse herb	Whole plant
15.	<i>Alysicarpus vaginalis</i> (L.) DC.	Papilionaceae	<i>Elupotti</i>	Diffuse herb	Whole plant
16.	<i>Amaranthus spinosus</i> L.	Amaranthaceae	<i>Mullu harive</i>	Erect herb	Young parts
17.	<i>Anisomeles indica</i> (L.) Kuntze	Lamiaceae	-	Under shrub	Young parts
18.	<i>Antidesma acidum</i> Retz.	Euphorbiaceae	<i>Huli majjige kolu</i>	Large shrub	Young parts
19.	<i>Antidesma ghaesembilla</i> Gaertn.	Euphorbiaceae	<i>Chauli hannu</i>	Small tree	Young parts
20.	<i>Antidesma menasu</i> Miq.	Euphorbiaceae	<i>Beegada soppu</i>	Small tree	Young parts
21.	<i>Apluda mutica</i> L.	Poaceae	-	Perennial grass	Whole plant
22.	<i>Aporusa lindleyana</i> (Wight) Baill	Euphorbiaceae	<i>Saroli</i>	Medium sized tree	Leaves and young shoot
23.	* <i>Areca catechu</i> L.	Arecaceae	<i>Kangu</i>	Tall tree	Leaf, leaf sheath and spathe
24.	<i>Argyreia elliptica</i> (Roth.) Choisy	Convolvulaceae	<i>Ermekulam</i>	Twining shrub	Leaves, young shoot
25.	<i>Aristida setacea</i> Retz.	Poaceae	-	Perennial grass	Whole plant
26.	<i>Artocarpus hirsutus</i> Lam.	Moraceae	<i>Hebbalasu</i>	Large tree	Leaves
27.	<i>Arundinella metzii</i> Hochst. ex Miq.	Poaceae	-	Annual grass	Whole plant
28.	<i>Arundinella pumila</i> (Hochst. ex A.Rich) Steud	Poaceae	-	Annual grass	Whole plant
29.	<i>Aeschynomene americana</i> L.	Papilionaceae	-	Erect herb	Whole plant
30.	<i>Aeschynomene indica</i> L.	Papilionaceae	-	Erect herb	Whole plant
31.	<i>Asystasia dalzelliana</i> Sant.	Acanthaceae	<i>Maithaballi</i>	Sub scandent herb	Whole plant
32.	<i>Asystasia gangetica</i> (L.) Anders	Acanthaceae	<i>Maithaal</i>	Procumbent herb	Whole plant
33.	<i>Atylosia scarabaeoides</i> (L.) Benth.	Papilionaceae	-	Slender twiner	Whole plant
34.	<i>Avicennia alba</i> Blume.	Verbenaceae	-	Shrub	Leaves and young shoot
35.	<i>Avicennia marina</i> (Forsskal) Vierh	Verbenaceae	-	Small tree	Leaves and young shoot
36.	<i>Avicennia officinalis</i> L.	Verbenaceae	-	Small tree	Leaves and young shoot
37.	<i>Axonopus compressus</i> (Swartz) P. Beauv.	Poaceae	-	Perennial grass	Whole plant
38.	<i>Bambusa arundinacea</i> (Retz.) Roxb.	Poaceae	<i>Bidiru</i>	Thorny bamboo	Leaves
39.	* <i>Bauhinia acuminata</i> L.	Caesalpinaceae	<i>Bili mandara</i>	Shrub	Leaves and young shoot

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Table 1 contd.....

40.	<i>Bauhinia malabarica</i> Roxb.	Caesalpiniaceae	<i>Kadu mandara</i>	Medium sized tree	Leaves and young shoot
41.	* <i>Bauhinia purpurea</i> L.	Caesalpiniaceae	<i>Mandara</i>	Medium sized tree	Leaves and young shoot
42.	* <i>Bauhinia tomentosa</i> L.	Caesalpiniaceae	<i>Kempu mandara</i>	Shrub	Leaves and young shoot
43.	* <i>Bauhinia variegata</i> L.	Caesalpiniaceae	<i>Deva mandara</i>	Small tree	Leaves and young shoot
44.	<i>Blumea barbata</i> DC.	Asteraceae	-	Erect herb	Whole plant
45.	<i>Blumea lacera</i> (Burm.f.) DC.	Asteraceae	-	Erect herb	Whole plant
46.	<i>Blumea mollis</i> (D.Don.) Merr.	Asteraceae	-	Erect herb	Whole plant
47.	<i>Blumea oxydonta</i> DC.	Asteraceae	-	Prostrate herb	Whole plant
48.	<i>Blumea virens</i> Wall. ex DC.	Asteraceae	-	Erect herb	Whole plant
49.	<i>Brachiaria milliformis</i> (Presl) A. Chase	Poaceae	-	Annual grass	Whole plant
50.	<i>Breynia vitis - idaea</i> (Burm.f.) C.Fischer	Euphorbiaceae	<i>Palli chappu</i>	Shrub	Young shoot
51.	<i>Briedelia retusa</i> (L.) Spreng	Euphorbiaceae	<i>Mullu bengal</i>	Medium sized tree	Leaves and young shoot
52.	<i>Bulbophyllum sterile</i> (Lam.) Suresh	Orchidaceae	<i>Pole kayi</i>	Epiphyte	Pseudo bulbs
53.	<i>Calycopteris floribunda</i> Lam.	Combretaceae	<i>Enjiru</i>	Scandent shrub	Young shoot
54.	<i>Cassia kleinii</i> Wight & Arn.	Caesalpiniaceae	-	Procumbent under shrub	Young shoot
55.	<i>Cassia mimosoides</i> L.	Caesalpiniaceae	-	Diffuse under shrub	Young shoot
56.	<i>Cassia occidentalis</i> L.	Caesalpiniaceae	<i>Petha thajanku</i>	Erect under shrub	Young shoot
57.	<i>Cassia tora</i> L.	Caesalpiniaceae	<i>Thagache</i>	Erect herb	Whole plant
58.	<i>Centella asiatica</i> (L.) Urban	Apiaceae	<i>Urage</i>	Prostrate herb	Whole plant
59.	<i>Centotheca lappacea</i> (L.)Desvaux	Poaceae	-	Perennial grass	Whole plant
60.	<i>Chassalia curviflora</i> (Wall.) Thw.	Rubiaceae	<i>Kaadu pathala garuda</i>	Erect shrub	Young shoot
61.	<i>Chloris barbata</i> SW.	Poaceae	-	Perennial grass	Whole plant
62.	<i>Commelina bengalensis</i> L.	Commelinaceae	-	Diffuse herb	Whole plant
63.	<i>Commelina diffusa</i> Burm.f.	Commelinaceae	-	Diffuse herb	Whole plant
64.	<i>Commelina maculata</i> Edgew.	Commelinaceae	-	Sub scandent herb	Whole plant
65.	<i>Costus speciosus</i> (Koenig) Smith	Zingiberaceae	<i>Narikabbu</i>	Erect herb	Whole plant
66.	<i>Crassocephalum crepidioides</i> (Benth.) S. Moore	Asteraceae	-	Erect herb	Whole plant
67.	<i>Cyanotis cristata</i> (L.) D. Don.	Commelinaceae	-	Diffuse herb	Whole plant
68.	<i>Cyathula prostrata</i> (L.) Blume	Amaranthaceae	<i>Kempu uttarane</i>	Prostrate herb	Whole plant
69.	<i>Cynodon dactylon</i> (L.) Pers.	Poaceae	<i>Garike</i>	Perennial grass	Whole plant
70.	<i>Cyperus compressus</i> L.	Cyperaceae	-	Tufted annual	Whole plant
71.	<i>Cyperus difformis</i> L.	Cyperaceae	-	Tufted annual	Whole plant
72.	<i>Cyperus halpan</i> L. ssp. <i>halpan</i>	Cyperaceae	-	Perennial herb	Whole plant
73.	<i>Cyperus iria</i> L.	Cyperaceae	-	Tufted annual	Whole plant
74.	<i>Cyperus rotundus</i> L.	Cyperaceae	<i>Bhadramusti</i>	Perennial herb	Whole plant
75.	<i>Cyperus tenuispica</i> Steud.	Cyperaceae	-	Tufted annual	Whole plant
76.	<i>Cyrtococcum oxyphyllum</i> (Steud.) Stapf.	Poaceae	-	Perennial grass	Whole plant
77.	<i>Dactyloctenium aegyptium</i> (L.) P.Beauv.	Poaceae	-	Annual grass	Whole plant
78.	<i>Dalbergia horrida</i> (Dennst.) Mabberley	Papilionaceae	<i>Parantolu</i>	Large scandent shrub	Young shoot

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79.	<i>Dalbergia latifolia</i> Roxb.	Papilionaceae	<i>Beeti</i>	Large tree	Leaves and young shoot
80.	<i>Dalbergia volubilis</i> Roxb.	Papilionaceae	<i>Karalenki</i>	Woody climber	Leaves and young shoot
81.	<i>Desmodium heterocarpon</i> (L.) DC.	Papilionaceae	-	Sub erect shrub	Whole plant
82.	<i>Desmodium heterophyllum</i> (Willd.) DC.	Papilionaceae	-	Trailing herb	Whole plant
83.	<i>Desmodium triangulare</i> (Retz.) Merr.	Papilionaceae	-	Erect shrub	Young shoot
84.	<i>Desmodium triflorum</i> (L.) DC.	Papilionaceae	<i>Nelapparande</i>	Trailing herb	Whole plant
85.	<i>Desmodium triquetrum</i> (L.) DC.	Papilionaceae	<i>Kudka bacchire</i>	Erect under shrub	Whole plant
86.	<i>Desmodium velutinum</i> (Willd.) DC.	Papilionaceae	-	Erect under shrub	Whole plant
87.	<i>Digitaria bicornis</i> (Lamk.) Roem. and Schult. ex Loud.	Poaceae	-	Annual grass	Whole plant
88.	<i>Digitaria ciliaris</i> (Retz.) Koeler	Poaceae	-	Annual grass	Whole plant
89.	<i>Digitaria setigera</i> Roth. ex. Roem. And Schult	Poaceae	-	Annual grass	Whole plant
90.	<i>Dimeria hohenackeri</i> Hochst ex. Miq.	Poaceae	-	Annual grass	Whole plant
91.	<i>Dipteracanthus prostratus</i> (Poir.) Nees.	Acanthaceae	-	Diffuse herb	Whole plant
92.	<i>Echinochloa colona</i> (L.) Link.	Poaceae	-	Annual grass	Whole plant
93.	<i>Eclipta prostrata</i> (L.) L.	Asteraceae	<i>Garga</i>	Erect herb	Whole plant
94.	<i>Elephantopus scaber</i> L.	Asteraceae	<i>Nelamuchhilu</i>	Stiff herb	Whole plant
95.	<i>Eleusine indica</i> (L.) Gaertn.	Poaceae	<i>Kadu raagi</i>	Tufted grass	Whole plant
96.	<i>Emilia sonchifolia</i> (L.) DC.	Asteraceae	<i>Elikivi</i>	Diffuse herb	Whole plant
97.	<i>Eragrostis tenella</i> (L.) P. Beauv. ex Roem. & Schult	Poaceae	-	Perennial grass	Whole plant
98.	<i>Eragrostis uniloides</i> (Retz.) Nees ex Steud.	Poaceae	-	Annual grass	Whole plant
99.	<i>Eranthemum roseum</i> (Vahl.) R. Br.	Acanthaceae	-	Under shrub	Young shoot
100.	<i>Erythrina stricta</i> Roxb.	Papilionaceae	-	Deciduous tree	Leaves
101.	<i>Erythrina variegata</i> L. var. <i>orientalis</i> (L.) Merr.	Papilionaceae	<i>Hongare</i>	Deciduous tree	Leaves
102.	<i>Eulalia trispicata</i> (Schult.) Henr.	Poaceae	-	Perennial grass	Whole plant
103.	<i>Ficus hispida</i> L. f.	Moraceae	<i>Ande pajavu</i>	Small tree	Young shoot
104.	<i>Fimbristylis aestivalis</i> (Retz.)	Cyperaceae	-	Tufted annual	Whole plant
105.	<i>Fimbristylis littoralis</i> Gaudich.	Cyperaceae	-	Tufted annual	Whole plant
106.	<i>Garuga pinnata</i> Roxb.	Burseraceae	<i>Arenelli</i>	Medium sized tree	Leaves
107.	<i>Geissaspis cristata</i> Wight & Arn.	Papilionaceae	<i>Kudu hullu</i>	Diffuse herb	Whole plant
108.	<i>Glinus oppositifolius</i> (L.) A. DC.	Molluginaceae	-	Diffuse herb	Whole plant
109.	* <i>Gliricidia sepium</i> (Jacq.) Walp.	Papilionaceae	<i>Itina gida</i>	Small tree	Leaves
110.	<i>Glochidion zeylanicum</i> (Gaertner) A. Juss.	Euphorbiaceae	<i>Saroli</i>	Small tree	Leaves and young shoot
111.	<i>Glycine pentaphylla</i> Dalz.	Papilionaceae	-	Climbing shrub	Whole plant
112.	<i>Gomphrena celosoides</i> Mart.	Amaranthaceae	-	Prostrate herb	Whole plant
113.	<i>Gymnema sylvestre</i> (Retz.) R. Br. ex Schult.	Asclepiadaceae	<i>Madhu nashini</i>	Twiner	Whole plant
114.	<i>Gymnostachyum febrifugum</i> Benth.	Acanthaceae	<i>Chitikana gadde</i>	Small herb	Whole plant
115.	<i>Haldina cordifolia</i> (Roxb.) Ridsd.	Rubiaceae	<i>Anavu</i>	Large tree	Leaves and young shoot
116.	<i>Hedyotis auricularia</i> L.	Rubiaceae	<i>Nelannekkare</i>	Trailing herb	Whole plant
117.	<i>Helicteres isora</i> L.	Sterculiaceae	<i>Kidenjal ballu</i>	Shrub	Young shoot
118.	<i>Heliotropium indicum</i> L.	Boraginaceae	<i>Chelubalada gida</i>	Erect herb	Whole plant

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Table 1 contd...

119.	<i>Heteropogon contortus</i> (L.) P. Beauv. ex Roem. and Schult.	Poaceae	<i>Meese muli</i>	Perennial grass	Whole plant
120.	<i>Hygroryza aristata</i> (Retz.) Nees ex Wight and Arn.	Poaceae	-	Aquatic grass	Whole plant
121.	<i>Hyptis suaveolens</i> (L.) Poit.	Lamiaceae	<i>Kaadu gasagase</i>	Tall herb	Whole plant
122.	<i>Imperata cylindrica</i> (L.) Raeusch.	Poaceae	<i>Dharbe</i>	Perennial grass	Whole plant
123.	* <i>Ipomoea batatas</i> (L.) Lam.	Convolvulaceae	<i>Genasu</i>	Creeping herb	Whole plant
124.	<i>Ipomoea mauritiana</i> Jacq.	Convolvulaceae	<i>Nelakumbala</i>	Large climber	Whole plant
125.	<i>Ipomoea obscura</i> (L.) Ker - Gawl.	Convolvulaceae	<i>Tirutali</i>	Twinning herb	Whole plant
126.	<i>Ipomoea sepiaria</i> Roxb.	Convolvulaceae	<i>Tirutali</i>	Twinning herb	Whole plant
127.	<i>Ipomoea triloba</i> L.	Convolvulaceae	<i>Urutele balli</i>	Twinning herb	Whole plant
128.	<i>Isachne globosa</i> (Thunb.) O. Ktze.	Poaceae	<i>Nore hullu</i>	Slender grass	Whole plant
129.	<i>Ischaemum indicum</i> (Houtt.) Merrill	Poaceae	-	Perennial grass	Whole plant
130.	<i>Ischaemum mangaluricum</i> (Hack.) Stapf. ex Fischer	Poaceae	-	Perennial grass	Whole plant
131.	<i>Ixora brachiata</i> Roxb.	Rubiaceae	<i>Korajji</i>	Small tree	Young shoot
132.	<i>Justicia procumbens</i> L.	Acanthaceae	<i>Poddolu poo</i>	Diffuse herb	Whole plant
133.	<i>Justicia trinervia</i> Vahl.	Acanthaceae	-	Procumbent herb	Whole plant
134.	<i>Justicia wynaadensis</i> (Nees) Heyne ex T. Anders	Acanthaceae	<i>Maddu soppu</i>	Erect under shrub	Young shoot
135.	<i>Kyllinga brevifolia</i> Rottb.	Cyperaceae	-	Perennial herb	Whole plant
136.	<i>Kyllinga nemoralis</i> (Forster) Dandy ex Hutchinson	Cyperaceae	-	Perennial herb	Whole plant
137.	<i>Lannea coromandelica</i> (Houtt.) Merr.	Anacardiaceae	<i>Purli, godda</i>	Medium sized tree	Leaves and young shoot
138.	<i>Leea asiatica</i> (L.) Ridsdale	Leeaceae	<i>Sanna nedthe</i>	Erect under shrub	Young shoot
139.	<i>Leea indica</i> (Burm. f.) Merr.	Laceaceae	<i>Nedthe</i>	Large shrub	Young shoot
140.	<i>Leersia hexandra</i> SW.	Poaceae	-	Perennial grass	Whole plant
141.	<i>Lepidagathis fasciculata</i> (Retz.) Nees.	Acanthaceae	-	Diffuse herb	Whole plant
142.	<i>Lepidagathis incurva</i> D. Don. var. <i>incurva</i>	Acanthaceae	-	Prostate herb	Whole plant
143.	<i>Leptadenia reticulata</i> (Retz.) Wight & Arn. ex Wight.	Asclepiadaceae	<i>Jeevahale</i>	Twining shrub	Young shoot
144.	* <i>Leucaena latisiliqua</i> (L.) Gillis	Mimosaceae	<i>Subaabul</i>	Small tree	Leaves
145.	<i>Lindernia antipoda</i> (L.) Alston	Scrophulariaceae	-	Decumbent herb	Whole plant
146.	<i>Lindernia crustacea</i> (L.) F. Muell.	Scrophulariaceae	-	Diffuse herb	Whole plant
147.	<i>Loeseneriella arnottiana</i> (Wight) A. C. Smith.	Hippocrateaceae	<i>Maderi balli</i>	Climbing shrub	Young shoot
148.	<i>Ludwigia hyssopifolia</i> (G. Don.) Exell	Onagraceae	-	Erect herb	Young shoot
149.	<i>Ludwigia perennis</i> L.	Onagraceae	-	Erect herb	Whole plant
150.	<i>Macaranga peltata</i> (Roxb.) Muell. Arg.	Euphorbiaceae	<i>Uppaligana mara</i>	Large tree	Leaves
151.	<i>Mallotus philippensis</i> (Lam.) Muell. Arg.	Euphorbiaceae	<i>Kunkumada mara</i>	Medium sized tree	Leaves
152.	<i>Melastoma malabathricum</i> L.	Melastomataceae	<i>Nekkare</i>	Large shrub	Tender shoot
153.	<i>Memecylon malabaricum</i> (Clarke) Cogn.	Melastomataceae	<i>Ollekodi</i>	Shrub	Tender shoot
154.	<i>Merremia tridentata</i> (L.) Hall. f.	Convolvulaceae	<i>Prasarini</i>	Twinning herb	Whole plant
155.	<i>Merremia umbellata</i> (L.) Hall. f.	Convolvulaceae	-	Climbing herb	Whole plant
156.	<i>Merremia vitifolia</i> (Burm. f.) Hall. f.	Convolvulaceae	-	Twinning herb	Whole plant
157.	<i>Mimosa pudica</i> L.	Mimosaceae	<i>Naachige mullu</i>	Diffuse under shrub	Young shoot
158.	<i>Mitracarpus hirtus</i> (L.) DC.	Rubiaceae	-	Erect herb	Whole plant

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Table 1 contd.....

159.	<i>Mitragyna parvifolia</i> (Roxb.) Korth.	Rubiaceae	<i>Kongu</i>	Large tree	Leaves and young shoot
160.	<i>Monochoria vaginalis</i> (Burm. f.) K. B. Presl.	Pontederiaceae	-	Fresh water herb	Whole plant
161.	* <i>Morus australis</i> Poir.	Moraceae	<i>Hippenerale</i>	Small tree	Leaves and young shoot
162.	<i>Mucuna pruriens</i> (L.) DC.	Papilionaceae	<i>Naayi sonag</i>	Twinning herb	Young shoot
163.	<i>Mussaenda belilla</i> Buch. - Ham.	Rubiaceae	<i>Bellante</i>	Climbing shrub	Young shoot
164.	<i>Naregamia alata</i> Wight & Arn.	Meliaceae	<i>Nelakkanchi</i>	Stout under shrub	Whole plant
165.	<i>Olea dioica</i> Roxb.	Oleaceae	<i>Arimara</i>	Medium sized tree	Young shoot
166.	<i>Ophiorrhiza rugosa</i> Wall.	Rubiaceae	<i>Garuda patala</i>	Erect herb	Whole plant
167.	<i>Oplismenus burmannii</i> (Retz.) P. Beauv.	Poaceae	-	Annual herb	Whole plant
168.	<i>Oplismenus compositus</i> (L.) P. Beauv.	Poaceae	-	Annual herb	Whole plant
169.	<i>Oryza rufipogon</i> Griff.	Poaceae	<i>Kaadu bhatha</i>	Aquatic grass	Whole plant
170.	* <i>Oryza sativa</i> L.	Poaceae	<i>Bhatha</i>	Annual grass	Straw
171.	<i>Ottochloa nodosa</i> (Kunth.) Dandy	Poaceae	-	Perennial grass	Whole plant
172.	<i>Panicum maximum</i> Jacq.	Poaceae	-	Perennial grass	Whole plant
173.	<i>Panicum paludosum</i> Roxb.	Poaceae	-	Perennial grass	Whole plant
174.	<i>Panicum repens</i> L.	Poaceae	<i>Shunti hullu</i>	Perennial grass	Whole plant
175.	<i>Paspalidium flavidum</i> (Retz.) A. Camus	Poaceae	-	Annual grass	Whole plant
176.	<i>Paspalidium punctatum</i> (Burm. f.) A. Camus	Poaceae	-	Perennial grass	Whole plant
177.	<i>Paspalum conjugatum</i> Berg.	Poaceae	-	Perennial grass	Whole plant
178.	<i>Paspalum scrobiculatum</i> L.	Poaceae	-	Perennial grass	Whole plant
179.	* <i>Peltophorum pterocarpum</i> (DC.) Backer ex K. Heyne	Caesalpiniaceae	-	Medium sized tree	Leaves and young shoot
180.	<i>Pennisetum polystachyon</i> (L.) Schult.	Poaceae	-	Annual grass	Whole plant
181.	<i>Peristrophe bicalyculata</i> (Retz.) Nees.	Acanthaceae	-	Erect herb	Whole plant
182.	<i>Phyllocephalum scabridum</i> (DC.) Kirkman	Asteraceae	-	Erect herb	Whole plant
183.	* <i>Pistia stratiotes</i> L.	Araceae	<i>Antara gange</i>	Free floating herb	Whole plant
184.	<i>Pithecellobium dulce</i> (Roxb.) Benth.	Mimosaceae	-	Small tree	Leaves
185.	<i>Pogostemon paniculatus</i> (Willd.) Benth.	Lamiaceae	<i>Trichata</i>	Erect herb	Whole plant
186.	<i>Pogostemon purpurascens</i> Dalz.	Lamiaceae	-	Erect herb	Whole plant
187.	<i>Polygonum chinense</i> L.	Polygonaceae	-	Spreading herb	
188.	<i>Pothos scandens</i> L.	Araceae	<i>Arkeburu</i>	Climbing shrub	Young shoot
189.	<i>Pouzolzia zeylanica</i> (L.) Benn.	Urticaceae	-	Erect herb	Whole plant
190.	<i>Pseudanthistiria heteroclita</i> (Roxb.) Hook. f.	Poaceae	<i>Humuli</i>	Annual grass	Whole plant
191.	<i>Pseudanthistiria umbellata</i> (Hack.) Hook. f.	Poaceae	-	Annual grass	Whole plant
192.	<i>Pterocarpus marsupium</i> Roxb.	Papilionaceae	<i>Benga</i>	Large tree	Leaves and young shoot
193.	<i>Pycnospora lutescens</i> (Poir.) Schindler	Papilionaceae	-	Trailing herb	Whole plant
194.	<i>Pycreus macrostachyos</i> (Lam.) J. Raynal	Cyperaceae	-	Perennial herb	Whole plant
195.	<i>Pycreus polystachyos</i> (Roth.) P. Beauv.	Cyperaceae	-	Perennial herb	Whole plant
196.	<i>Rhinacanthus nasutus</i> (L.) Nees.	Acanthaceae	<i>Nagamallige</i>	Under shrub	Young shoot
197.	<i>Rottboellia cochinchinensis</i> (Lour.) Clayton	Poaceae	-	Annual grass	Whole plant

Contd..... Table 1

Table 1 contd....

198.	* <i>Saccharum officinarum</i> L.	Poaceae	<i>Kabbu</i>	Tall perennial grass	Leaves
199.	<i>Saccharum spontaneum</i> L.	Poaceae	<i>Naikabbu</i>	Tall perennial grass	Leaves
200.	<i>Sacciolepis indica</i> (L.) A. Chase	Poaceae	-	Slender grass	Whole plant
201.	<i>Sacciolepis interrupta</i> (Willd.) Stapf.	Poaceae	-	Perennial grass	Whole plant
202.	* <i>Samanea saman</i> (Jacq.) Merr.	Mimosaceae	<i>Kadu devadaru</i>	Large tree	Leaves and pods
203.	* <i>Sauropus androgynus</i> (L.) Merr.	Euphorbiaceae	<i>Vitamin soppu</i>	Erect shrub	Tender shoot
204.	<i>Scleria levis</i> Retz.	Cyperaceae	-	Perennial herb	Whole plant
205.	<i>Scleria lithosperma</i> (L.) Swartz.	Cyperaceae	-	Perennial herb	Whole plant
206.	<i>Scoparia dulcis</i> L.	Scrophulariaceae	<i>Dodda parpata</i>	Erect herb	Whole plant
207.	<i>Sebastiania chamaelea</i> (L.) Muell. Arg.	Euphorbiaceae	<i>Kuva kurunthoti</i>	Erect herb	Whole plant
208.	* <i>Sesbania grandiflora</i> (L.) Poir.	Papilionaceae	<i>Agase</i>	Small tree	Leaves and tender shoot
209.	<i>Setaria pumila</i> (Poir.) Roem. and Schult.	Poaceae	-	Annual grass	Whole plant
210.	<i>Smithia conferta</i> Smith	Papilionaceae	-	Diffuse herb	Whole plant
211.	<i>Smithia salsuginea</i> Hance	Papilionaceae	-	Erect herb	Whole plant
212.	<i>Smithia sensitiva</i> Ait.	Papilionaceae	-	Diffuse herb	Whole plant
213.	<i>Spermacoce articularis</i> L. f.	Rubiaceae	<i>Tartavalu</i>	Diffuse herb	Whole plant
214.	<i>Spermacoce latifolia</i> Aubl.	Rubiaceae	-	Diffuse herb	Whole plant
215.	<i>Spermacoce malabarica</i> (Sivarajan and Manilal) Sivarajan	Rubiaceae	-	Diffuse herb	Whole plant
216.	<i>Spermacoce mauritiana</i> O. Gideon	Rubiaceae	-	Diffuse herb	Whole plant
217.	<i>Spermacoce pusilla</i> Wall.	Rubiaceae	-	Erect herb	Whole plant
218.	<i>Spilanthes calva</i> DC.	Asteraceae	-	Creeping herb	Whole plant
219.	<i>Spilanthes paniculata</i> Wallich ex DC.	Asteraceae	<i>Hommugulu</i>	Diffuse herb	Whole plant
220.	<i>Spilanthes radicans</i> Jacq.	Asteraceae	-	Erect herb	Whole plant
221.	<i>Sporobolus diander</i> (Retz.) P. Beauv.	Poaceae	-	Perennial grass	Whole plant
222.	<i>Sporobolus piliferus</i> (Trin.) Kunth.	Poaceae	-	Annual grass	Whole plant
223.	<i>Staurogyne glauca</i> (Nees) Kuntze	Acanthaceae	-	Erect herb	Whole plant
224.	<i>Strobilanthes barbatus</i> Nees	Acanthaceae	-	Large shrub	Young shoot
225.	<i>Strobilanthes ciliates</i> Nees.	Acanthaceae	<i>Kirim kurumi</i>	Shrub	Young shoot
226.	<i>Strobilanthes integrifolius</i> Kuntze	Acanthaceae	-	Shrub	Young shoot
227.	<i>Synedrella nodiflora</i> (L.) Gaertn.	Asteraceae	<i>Naayi tulasi</i>	Erect herb	Whole plant
228.	<i>Syzygium caryophyllatum</i> (L.) Alston	Myrtaceae	<i>Kuntaneral</i>	Small tree	Leaves and young shoot
229.	<i>Syzygium cumini</i> (L.) Skeels	Myrtaceae	<i>Nerale</i>	Large tree	Leaves and young shoot
230.	<i>Syzygium zeylanicum</i> (L.) DC.	Myrtaceae	<i>Bili kuntala</i>	Small tree	Leaves and young shoot
231.	<i>Themeda tremula</i> (Nees ex. Steud.) Hack.	Poaceae	<i>Gejje muli</i>	Perennial grass	Whole plant
232.	<i>Themeda triandra</i> Forssk.	Poaceae	<i>Gejje muli</i>	Perennial grass	Whole plant
233.	<i>Torenia bicolor</i> Dalz.	Scrophulariaceae	<i>Kakapoo</i>	Procumbent herb	Whole plant
234.	<i>Trema orientalis</i> (L.) Blume	Ulmaceae	<i>Nugamaram</i>	Small tree	Leaves and young shoot
235.	<i>Ventilago madraspatana</i> Gaertn.	Rhamnaceae	<i>Aithala balli</i>	Woody climber	Young shoot
236.	<i>Vernonia cinerea</i> (L.) Less.	Asteraceae	<i>Sahadevi</i>	Erect herb	Whole plant
237.	<i>Vigna dalzelliana</i> (Kuntze) Verdc.	Papilionaceae	<i>Kaadu hesaru</i>	Twining herb	Whole plant
238.	* <i>Vigna mungo</i> (L.) Hepper	Papilionaceae	<i>Uddu</i>	Sub erect herb	Whole plant
239.	<i>Vigna pilosa</i> (Willd.) Baker	Papilionaceae	-	Twining herb	Whole plant
240.	* <i>Vigna radiata</i> var. <i>radiata</i> (L.) Wilczek.	Papilionaceae	<i>Hesaru</i>	Sub erect herb	Whole plant
241.	<i>Vigna radiata</i> var. <i>sublobata</i> (Roxb.) Verdc.	Papilionaceae	<i>Kaadu hesaru</i>	Climbing herb	Whole plant
242.	<i>Vigna vexillata</i> (L.) A. Rich	Papilionaceae	-	Trailing herb	Whole plant
243.	<i>Wedelia chinensis</i> (Osbeck.) Merr.	Asteraceae	-	Procumbent herb	Whole plant
244.	<i>Wendlandia thyrsoides</i> (Roem. and Schult) Steud.	Rubiaceae	<i>Tilige</i>	Large shrub	Young shoot
245.	* <i>Zea mays</i> L.	Poaceae	<i>Mekkejola</i>	Annual grass	Leaves

**Conclusion:**

From present study it is clear that Kasaragod district is rich in fodder resources. Critical review of literature reveals that majority of these plants are having medicinal properties. Use of these medicinal, natural plants as fodder will certainly help to improve the general health of cattle and also quality of milk, which in turn the health of human beings. At present more and more farmers are compelled to utilize these natural resources for fodder owing to health hazards of both cattle and their masters due to the use of adulterated cattle feeds. During summer season, the available resources are only a few as majority of these are annual herbs. This makes it necessary to

domesticate some of the species like *Adenanthera pavonina* L., *Albizia lebbek* (L.) Willd., *Dalbergia volubilis* Roxb., *Helicteres isora* L., *Morus australis* Poit., *Pennisetum polystachyon* (L.) Schult, *Samanea saman* (Jacq.) Merr., which can be utilized during food scarcity.

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