

Plant diversity in the homegardens of Karwar, Karnataka, India

SHIVANAND BHAT^{1,2,♥}, M. JAYAKARA BHANDARY¹, L. RAJANNA³

¹Department of Botany, Government Arts and Science College, Karwar-581301, Karnataka, India. Tel.+91-8382-226362, Fax. +91-8382-226362, ♥email: botssbhat2007@rediffmail.com.

²Department of Botany, Bharathiar University, Coimbatore, Tamilnadu, India.

³Department of Botany, Bangalore University, Jnanabharathi, Bangalore, Karnataka, India.

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ABSTRACT

Bhat S, Bhandary MJ, Rajanna L. 2014. Plant diversity in the homegardens of Karwar, Karnataka, India. *Biodiversitas* 15: 229-235. A study was conducted in 50 selected home gardens of Karwar, Karnataka, India to document their floristic diversity and composition with regard to life forms and uses. As many as 210 species of flowering plants belonging to 69 families were recorded. Euphorbiaceae (13 species), Apocynaceae (11 spp.), Cucurbitaceae (10 spp.) and Fabaceae (10 spp.) are the predominant families. Shrubs are the dominant life forms (73 spp.) followed by trees (61 spp.), herbs (42 spp.) and climbers (24 spp.). Areca palm (*Areca catechu*), coconut palm (*Cocos nucifera*), mango tree (*Mangifera indica*), banana (*Musa paradisiaca*), shoe flower (*Hibiscus rosa-sinensis*) and holy basil (*Ocimum tenuiflorum*) are the most common plants occurring in all of the 50 studied gardens. 38% of the plant species are grown mainly for ornamental and aesthetic purposes while 33% of the species are used for obtaining food products like fruits and vegetables and 22% of the plants are mainly used for medicinal purposes. The predominance of ornamental species makes the home gardens of Karwar different from those occurring in other regions in which mostly food plants form the major component.

Key words: Biodiversity conservation, homegarden biodiversity, Karnataka, India.

INTRODUCTION

Tropical home gardens are traditional agro-forestry systems characterized by the complexity of their structure and multiple functions (Das and Das 2005). They are, presumably, the oldest form of managed land-use systems next only to shifting cultivation (Kumar and Nair 2004). Homegardens are defined as land-use systems involving deliberate management of multipurpose trees and shrubs in intimate association with annual and perennial agricultural crops and invariably livestock within the compounds of the individual houses (Fernandes and Nair 1986).

Homegardens are dynamic in their evolution, composition and uses. Besides ensuring a diverse and stable supply of socio-economic products and services such as food, medicine, firewood, fodder, timber, etc. to the families that maintain them, home gardens are also recognised as important *in situ* sites of biodiversity conservation, especially of agro biodiversity. They also invite the attention of researchers as interesting models of sustainable agroecosystems characterised by efficient nutrient recycling, low external inputs, soil conservation potential, ecofriendly management practices, etc (Torquebiau 1992; Jose and Shanmugaratnam 1993).

Homegardens have been reported mainly from the tropical and sub-tropical regions of Asia, Africa and Meso-america and also from other regions like North America and Europe (Nair and Kumar 2006). In India, research on home gardens have been mainly concentrated in Kerala (Kumar et al. 1994; Puskarani 2002), Assam (Das and Das 2005) and Andaman islands (Pandey et al. 2006, 2007). No

scientific data is so far available from Karnataka State but for a study of tree species in the village ecosystems (Shastri et al. 2002). This study is therefore planned with the main objectives of inventorying the plant biodiversity of homegardens of the villages of Karwar of Karnataka State, India and understanding its uses. The data thus generated will form the basis for further studies regarding the structure and socio-economic contributions of home gardens of Karnataka, India.

MATERIALS AND METHODS

Karwar is a *taluk* (revenue sub-division) and administrative headquarters of Uttara Kannada district of Karnataka state of India. This area is situated between 14° 48' N latitude and 74° 11' E longitude and is surrounded by the West Coast and the Western Ghats of India. The total geographical area of the taluk is 724.12 sq kms. The present study was conducted in 10 villages of Karwar namely Arga, Chendya, Amadalli, Guddalli, Shirawad, Kadawad, Kinnar, Siddar, Ulaga and Halaga (Figure 1).

The people of the region represent a mixture of rich ethnic and cultural diversity. Brahmin, Halakki Gouda, Komar Panth, Konkani Marath, etc. are the predominant communities inhabiting this region. The area is still predominantly agrarian with other livelihood activities such as forest produce and firewood gathering, small scale business, etc. Paddy (*Oryza sativa*) is the principal crop cultivated. 'Konkani' and 'Kannada' are the main languages.

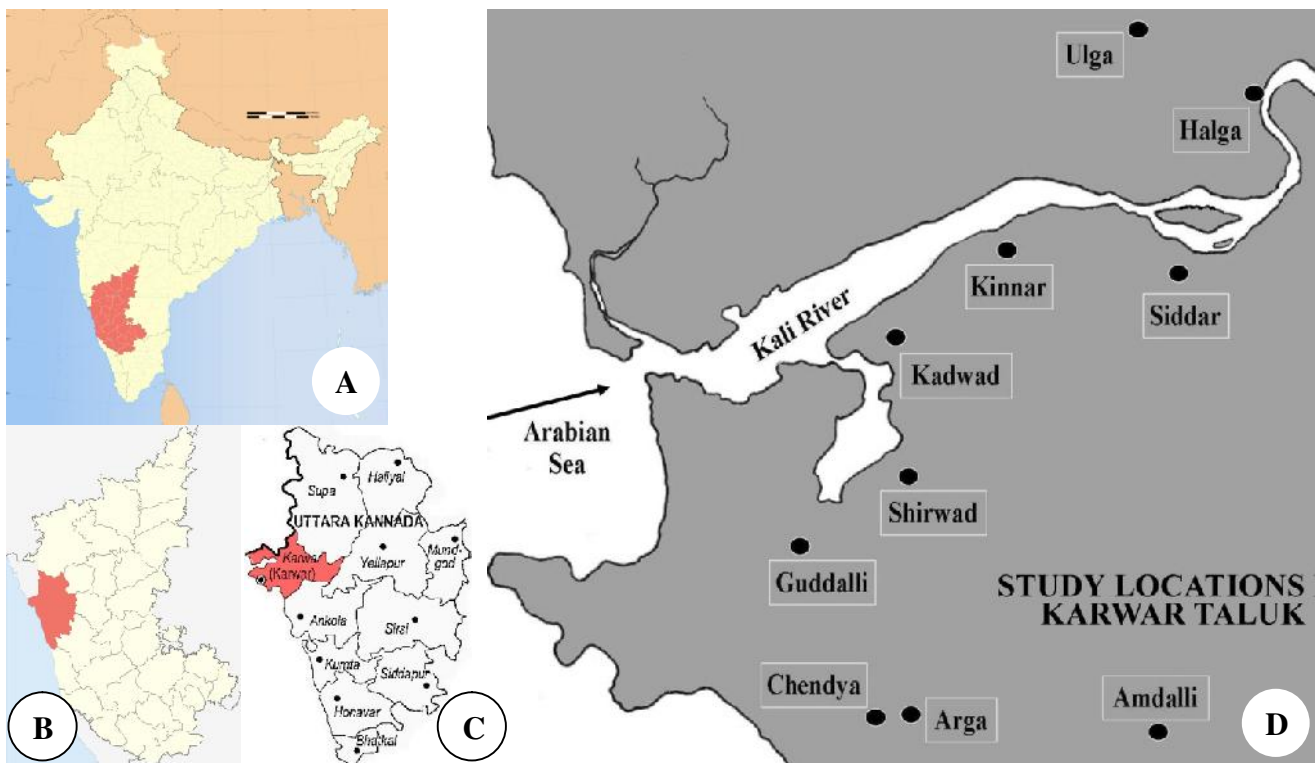


Figure 1. Map of study locations in Karwar, Uttara Kannada, Karnataka, India. A. Karnataka of India, B. Uttara Kannada of Karnataka, C. Karwar of Uttara Kannada. D. Detailed map of study site in Karwar.

The 50 home gardens covering the 10 chosen villages of the study area were selected for inventorying the floristic composition. In each of the home garden, a detailed survey of the plant species was made during different seasons of the study period which was extending from June 2013 to March 2014. The elder members of the household were interviewed to gather information about the local names, parts used and the uses of plant species present in their home gardens. Plants in the Home gardens were identified with the help of local flora and other relevant literature (Cooke 1967; Bhat 2003).

RESULTS AND DISCUSSION

The size of home gardens studied ranged from 0.01ha to 0.05ha, the average size being 0.02ha. A total of 210 species of flowering plants have been recorded from the 50 gardens during different seasons of the study period (Table 1). They belonged to 69 plant families. Families which are represented by 10 or more number of species are Euphorbiaceae (13 species), Apocynaceae (11 spp.), Cucurbitaceae (10 spp.) and Fabaceae (10 spp.). The 21 most important families with 4 or more number of species are shown in Fig.2. The minimum number of plants recorded in a garden is 44 and the maximum recorded number in a garden is 138. Species diversity depended on size of the garden and highest percentage of gardens (32%)

had species numbers ranging from 61 to 70 (Figure 3). 10 gardens had more than 70 species, out of which only one had more than 100 species.

Life-form analysis of the plant species (Figure 4) indicated that shrubs are the predominant forms with 73 species which account for 35% of the total recorded species. 61 species are trees (29%), 42 herbs (20%) and 34 are climbers (16%).

The species diversity of the home gardens of Karwar appears to be considerably high when compared to other parts of India. 122 species of plants are reported from the gardens of Barak Valley, Assam (Das and Das 2005), trees being the dominant forms. Number of plants reported from the Kerala home gardens by different workers ranges from 65 to 127 (Nair and Shreedharan 1986, Kumar et al. 1994, John and Nair 1999). However, higher diversity is found in the home gardens of Northern Thailand (230 species, Black et al. 1996), Nicaragua (324 species, Mendez et al. 2001) and West Java (602 species, Karyona 1990).

The 20 most common plants occurring in more than 75% of the studied homegardens are shown in Figure 5. Coconut palm (*Cocos nucifera*), mango tree (*Mangifera indica*), shoe flower (*Hibiscus rosa-sinensis*) and holy basil (*Ocimum sanctum*) are present in all the gardens (100% occurrence). Jack fruit tree (*Artocarpus heterophyllus*), areca palm (*Areca catechu*), banana (*Musa paradisiaca*) and basal leaf (*Basella alba*) are the other common plants which are recorded from more than 90% of the gardens.

Areca palm, coconut palm and banana plants are also the most dominant and important species in the gardens of Kerala (Jose and Shanmugaratanam 1993), Assam (Das and Das 2005) and Andamans (Pandey et al. 2006). Homegardens are also used as a place to maintain a few elite mother plants of some of the economically important plants mentioned above.

The species of plants in the home gardens of Karwar can be assigned into five major use categories as ornamental, medicinal, fruit yielding, vegetable yielding and others or miscellaneous which includes plants used as firewood source, timber yielding, fencing, etc. (Figure 6). This categorization is based on the main use of the plant as defined by the home garden owners as many plants are used for more than one of the above purposes. In the present study, ornamental plants are the most important use category with 38% of the recorded species belonging to this group which out numbers both of the food yielding

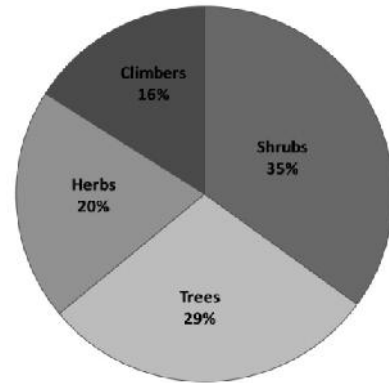


Figure 4. Composition of different plant life forms in the homegardens of Karwar, India.

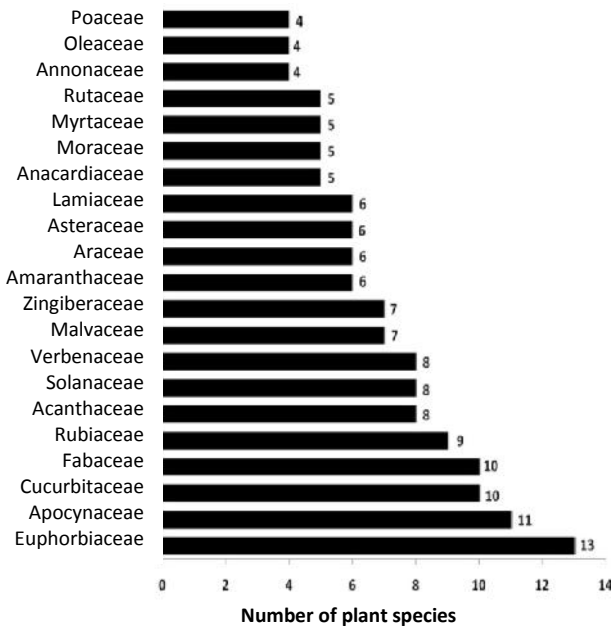


Figure 2. Important families of plants in the homegardens of Karwar, India.

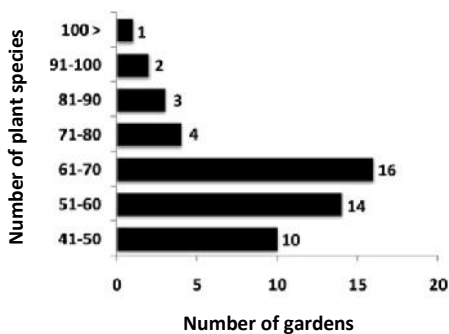


Figure 3. Number of species in the homegardens of Karwar, India.

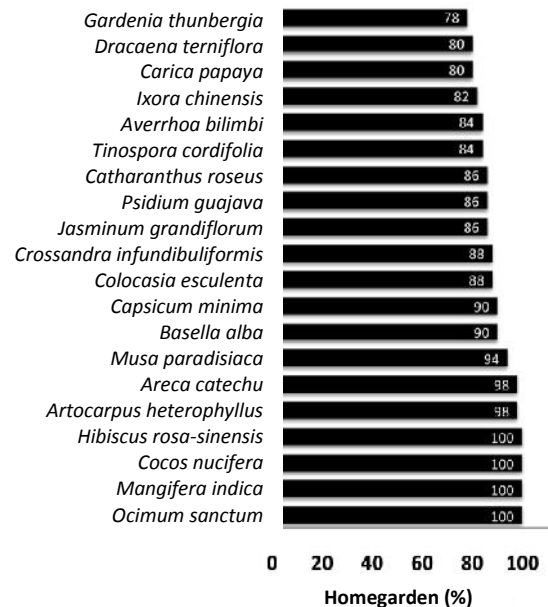


Figure 5. Most common plant species in the homegardens of Karwar, India.

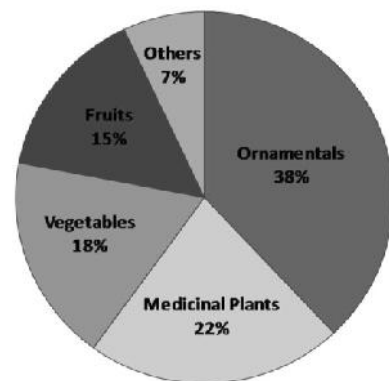


Figure 6. Different plant use categories in the homegardens of Karwar, India.

Table 1. Species diversity in the homegardens of Karwar, Karnataka, India.

Botanical name	Family	Local Name	Habit	Uses
<i>Abelmoschus esculentus</i> (L.) Moench	Malvaceae	Bendekayi	Shrub	Veg
<i>Acacia auriculiformis</i> A.Cunn.	Fabaceae	Acacia	Tree	Misc
<i>Acalypha wilkesiana</i> Muell.-Arg	Euphorbiaceae	Copper croton	Shrub	Orn
<i>Acorus calamus</i> L.	Araceae	Bhaje	Herb	Med
<i>Adhatoda zeylanica</i> Medikus	Acanthaceae	Aadusoge	Shrub	Med
<i>Aegle marmelos</i> (L.) Correa	Rutaceae	Bilva	Tree	Med
<i>Aerva lanata</i> (L.) Juss.	Amaranthaceae	Bilihindi soppu	Herb	Med
<i>Albizia lebbbeck</i> (L.) Benth	Fabaceae	Kalbaage	Tree	Misc
<i>Allamanda cathartica</i> L.	Apocynaceae	Mithaihoo	Climber	Orn
<i>Alocasia macrorrhiza</i> (L.) G.Don	Araceae	Marasanige	Shrub	Veg
<i>Aloe vera</i> (L.) Burm.F.	Liliaceae	Lolesara	Herb	Med
<i>Alpinia galanga</i> (L.) SW.	Zingiberaceae	Kallu shunti	Herb	Med
<i>Alstonia scholaris</i> (L.) R.Br.	Apocynaceae	Haalemara	Tree	Med
<i>Alternanthera bettzickiana</i> (Regel) Voss	Amaranthaceae	Show gida	Herb	Orn
<i>Alternanthera dentata</i> L.	Amaranthaceae	Rudrakshi hoo	Herb	Orn
<i>Amaranthus hybridus</i> L.	Amaranthaceae	Bili harige	Shrub	Veg
<i>Amaranthus tricolour</i> L.	Amaranthaceae	Harive soppu	Herb	Veg
<i>Amorphophallus commutatus</i> (Schott) Engl	Araceae	Suvarnagadde	Shrub	Veg
<i>Anacardium occidentale</i> L.	Anacardiaceae	Geru mara	Tree	Fr
<i>Ananas comosus</i> (L.) Merr.	Bromaliaceae	Parangi	Tree	Fr
<i>Andrographis paniculata</i> (Burm.f.) Wall	Acanthaceae	Kirath kaddi	Herb	Med
<i>Angelonia salicariifolia</i> Humb&Bonpl	Scrophulariaceae	Aame hoo	Herb	Orn
<i>Annona muricata</i> L.	Annonaceae	Hanumaanphala	Tree	Fr
<i>Annona reticulata</i> L.	Annonaceae	Ramphala	Tree	Fr
<i>Annona squamosa</i> L.	Annonaceae	Seetaphala	Tree	Fr
<i>Antigonon leptopus</i> Hook.&Arn.	Polygonaceae	Peppermint hovu	Climber	Orn
<i>Areca catechu</i> L.	Arecaceae	Adike	Tree	Fr
<i>Artocarpus gomezianus</i> Wall.	Moraceae	Vaate huli	Tree	Fr
<i>Artocarpus heterophyllus</i> Lam.	Moraceae	Halasu	Tree	Fr
<i>Artocarpus altilis</i> (Parkinson) Fosberg	Moraceae	Niirhalasu	Tree	Fr
<i>Asparagus racemosus</i> Willd.	Liliaceae	Shatavari	Climber	Med
<i>Asystasia gangetica</i> (L.) Anders	Acanthaceae	Maithaakaddi	Herb	Orn
<i>Averrhoa bilimbi</i> L.	Oxalidaceae	Bimbuli	Tree	Veg
<i>Averrhoa carambola</i> L.	Oxalidaceae	Karabalu	Tree	Fr
<i>Bambusa arundinacea</i> (Retz.) Roxb.	Poaceae	Bidiru	Tree	Veg
<i>Barleria cristata</i> L.	Acanthaceae	Gorate	Shrub	Orn
<i>Barleria prionitis</i> L.	Acanthaceae	Mullu gorate	Shrub	Orn
<i>Basella alba</i> L.	Basellaceae	Basale soppu	Climber	Veg
<i>Bauhinia acuminata</i> L.	Fabaceae	Bili mandara	Tree	Orn
<i>Bauhinia tomentosa</i> L.	Fabaceae	Mani mandara	Tree	Orn
<i>Benincasa hispida</i> (Thunb.) Cogn.	Cucurbitaceae	Boodukumbala	Climber	Veg
<i>Beta vulgaris</i> L.	Chinopodiaceae	Beet root	Herb	Veg
<i>Bixa orellana</i> L.	Bixaceae	Sindhoorikai	Shrub	Misc
<i>Boerhaavia diffusa</i> L.	Nyctaginaceae	Punarnava	Herb	Med
<i>Bougainvillea glabra</i> Choisy.	Nyctaginaceae	Kaagadadahoo	Shrub	Orn
<i>Brassica oleracea</i> var. <i>Gongylodes</i>	Brassicaceae	Navilakosu	Herb	Veg
<i>Caesalpinia pulcherrima</i> (L.) Swart.	Fabaceae	Huli Meesehoo	Tree	Orn
<i>Caladium bicolor</i> (Ait.) Vent	Araceae	Bannada gida	Herb	Orn
<i>Calotropis gigantea</i> (L.) R.Br.	Asclepiadaceae	Ekke	Shrub	Med
<i>Canavalia ensiformis</i> (L.) DC.	Fabaceae	Katti avare	Climber	Veg
<i>Canna indica</i> L.	Cannaceae	Kabaale	Shrub	Orn
<i>Capsicum annuum</i> L.	Solanaceae	Kempu menasu	Shrub	Veg
<i>Capsicum minima</i> L.	Solanaceae	Nuchhu menasu	Shrub	Veg
<i>Cardiospermum halicacabum</i> L.	Sapindaceae	Agni balli	Climber	Med
<i>Carica papaya</i> L.	Caricaceae	Pappale	Tree	Fr
<i>Catharanthus roseus</i> (L.) G.Don	Apocynaceae	Nityapushpa	Shrub	Orn
<i>Celosia argentea</i> L.	Amaranthaceae	Kolikombu	Herb	Orn
<i>Centella asiatica</i> (L.) Urban	Apiaceae	Ondelaga	Herb	Med
<i>Cestrum nocturnum</i> L.	Solanaceae	Raatri rani	Shrub	Orn
<i>Chassalia curviflora</i> (Wall.) Thw	Rubiaceae	Kadugarudapatala	Shrub	Med
<i>Chrysanthemum indicum</i> L.	Asteraceae	Sevantigehoo	Herb	Orn
<i>Citrullus lanatus</i> (Thunb.) Matsum & Nakai	Cucurbitaceae	Kallangadi	Climber	Fr
<i>Citrus aurantifolia</i> Swingle.	Rutaceae	Nimbe	Shrub	Med
<i>Citrus grandis</i> (L.) Osbeck	Rutaceae	Sakkarakanchi	Tree	Fr
<i>Citrus medica</i> L.	Rutaceae	Maadala	Shrub	Fr
<i>Citrus sinensis</i> (L.) Osbeck.	Rutaceae	Kittale	Tree	Fr

<i>Cleome speciosa</i> L.	Capparaceae	Meese Huvu	Shrub	Orn
<i>Clerodendrum calamitosum</i> L.	Verbenaceae	Kaadu mallige	Shrub	Orn
<i>Clerodendrum inerme</i> Gaerth.	Verbenaceae	Vishamadhari	Shrub	Orn
<i>Clerodendrum philippinum</i> Schau.	Verbenaceae	Madras mallige	Shrub	Orn
<i>Clerodendrum thomsoniae</i> L.	Verbenaceae	Rakta bakki	Climber	Orn
<i>Clitoria ternatea</i> L.	Fabaceae	Shankhapushpa	Climber	Orn
<i>Coccinia grandis</i> (L.) Voigt	Cucurbitaceae	Tonde balli	Climber	Veg
<i>Cocos nucifera</i> L.	Arecaceae	Tengu	Tree	Fr
<i>Codiaeum variegatum</i> L.	Euphorbiaceae	Bannada Gida	Shrub	Orn
<i>Coffea arabica</i> L.	Rubiaceae	coffee	Shrub	Misc
<i>Coleus amboinicus</i> Lour.	Lamiaceae	Sambaarasoppu	Herb	Med
<i>Coleus scutellarioides</i> (L.) Benth.	Lamiaceae	Chukke gida	Shrub	Orn
<i>Colocasia esculenta</i> (L.) Schott	Araceae	Kesu	Shrub	Veg
<i>Cordia obliqua</i> Willd.	Boraginaceae	Challehannu	Tree	Misc
<i>Cosmos sulphureus</i> Cav.	Asteraceae	Ketaki	Shrub	Orn
<i>Costus speciosus</i> (Koenig) Smith	Zingiberaceae	Narikabbu	Shrub	Med
<i>Crossandra infundibuliformis</i> (L.) Nees	Acanthaceae	Abbalige	Shrub	Orn
<i>Cucumis sativus</i> L.	Cucurbitaceae	Mullu savate	Herb	Veg
<i>Cucurbita moschata</i> (Lam.) Duch.	Cucurbitaceae	Sihikumbala	Climber	Veg
<i>Curcuma amada</i> Roxb.	Zingiberaceae	Ambe kombu	Herb	Veg
<i>Curcuma caesia</i> Roxb.	Zingiberaceae	Kuve gida	Herb	Med
<i>Curcuma longa</i> L.	Zingiberaceae	Arishina	Herb	Med
<i>Cymbopogon citratus</i> (DC.) Stapf.	Poaceae	Majjige hullu	Herb	Med
<i>Cynodon dactylon</i> (L.) Pers.	Poaceae	Garike	Herb	Med
<i>Dahlia tuberosa</i> Desf.	Asteraceae	Derehuvu	Shrub	Orn
<i>Datura metel</i> L.	Solanaceae	Keppottu soppu	Shrub	Med
<i>Dioscorea alata</i> L.	Dioscoreaceae	Mundigenasu	Climber	Veg
<i>Dioscorea bulbifera</i> L.	Dioscoreaceae	Heggenasu	Climber	Veg
<i>Dombeya burgessiae</i> Harv.	Sterculiaceae	December huvu	Shrub	Orn
<i>Dracaena terniflora</i> Roxb.	Agavaceae	Dracena	Shrub	Orn
<i>Duranta erecta</i> L.	Verbenaceae	Duranta	Shrub	Orn
<i>Emilia sonchifolia</i> (L.) DC.	Asteraceae	Ilikivi	Herb	Veg
<i>Ervatamia divaricata</i> (L.) Alston	Apocynaceae	Nandibattalu	Shrub	Orn
<i>Eryngium foetidum</i> L.	Apiaceae	Rakshasa kottumbari	Herb	Med
<i>Euphorbia cyathophora</i> Murray	Euphorbiaceae	Bannada gida	Shrub	Orn
<i>Euphorbia nerifolia</i> L.	Euphorbiaceae	Kalli gida	Shrub	Orn
<i>Euphorbia pulcherrima</i> Willd.ex Klotzsch	Euphorbiaceae	Bannada ele	Shrub	Orn
<i>Ficus racemosa</i> L.	Moraceae	Attimara	Tree	Med
<i>Ficus religiosa</i> L.	Moraceae	Ashwattha	Tree	Misc
<i>Garcinia indica</i> (Dupetit-Thouars) Choisy	Clusiaceae	Murugalu	Tree	Med
<i>Gardenia angusta</i> (L.) Merr.	Rubiaceae	Nandi Battalu	Shrub	Orn
<i>Gardenia thunbergia</i> L.	Rubiaceae	Nanjattale	Shrub	Orn
<i>Gliricidia sepium</i> (Jacq.) Walp	Fabaceae	Gobbara gida	Tree	Misc
<i>Gloriosa superba</i> L.	Liliaceae	Gowri Huvu	Climber	Med
<i>Gymnema sylvestre</i> (Retz.) R.Br.	Asclepiadaceae	Madhunashini	Climber	Med
<i>Hedychium coronarium</i> Koenig.	Zingiberaceae	Sugandi	Shrub	Orn
<i>Hibiscus mutabilis</i> L.	Malvaceae	Chandrakanti	Shrub	Orn
<i>Hibiscus radiatus</i> Cav.	Malvaceae	Mullu dasal	Shrub	Orn
<i>Hibiscus rosa-sinensis</i> L.	Malvaceae	Daasavaala	Tree	Orn
<i>Hibiscus schizopetalus</i> (Mast.) Hook.f.	Malvaceae	Gante daasavaala	Shrub	Orn
<i>Hibiscus syriacus</i> L.	Malvaceae	Nili dasal	Shrub	Orn
<i>Holarrhena pubescens</i> (Buch-Ham) Wall.	Apocynaceae	Kodasiga	Shrub	Med
<i>Holigarna arnottiana</i> Hook.f.	Anacardiaceae	Holagere	Tree	Misc
<i>Impatiens balsamina</i> L.	Balsaminaceae	Gourihoo	Herb	Orn
<i>Ipomoea batatas</i> (L.) Lam.	Convolvulaceae	Genasu	Climber	Veg
<i>Ipomoea carnea</i> Jacq.subsp.fistula	Convolvulaceae	Beli gida	Shrub	Misc
<i>Ixora brachiata</i> Roxb.	Rubiaceae	Bili gonchalu	Tree	Orn
<i>Ixora chinensis</i> Lam.	Rubiaceae	Ashoka	Shrub	Orn
<i>Ixora coccinea</i> L.	Rubiaceae	kusumale	Shrub	Med
<i>Jasminum grandiflorum</i> L.	Oleaceae	Jaaji mallige	Climber	Orn
<i>Jasminum multiflorum</i> (Burm.f.) Andr.	Oleaceae	Sooji mallige	Climber	Orn
<i>Jasminum sambac</i> (L.) Ait	Oleaceae	Gundu mallige	Climber	Orn
<i>Jatropha curcas</i> L.	Euphorbiaceae	Audalu-haralu	Shrub	Misc
<i>Kalanchoe pinnata</i> (Lam.) Pers.	Crassulaceae	Kaadubasale	Herb	Orn
<i>Lagenaria siceraria</i> (Molina) Standl.	Cucurbitaceae	Sorekai	Climber	Veg
<i>Lawsonia inermis</i> L.	Lythraceae	Madarangi	Shrub	Orn
<i>Luffa acutangula</i> (L.) Roxb.	Cucurbitaceae	Heerekai	Climber	Veg
<i>Luffa cylindrical</i> (L.) Roem.	Cucurbitaceae	Boluheere	Climber	Veg
<i>Lycopersicon lycopersicum</i> (L.) Farwell.	Solanaceae	Tomato	Shrub	Veg
<i>Macaranga peltata</i> (Roxb.) Muell.-Arg.	Euphorbiaceae	Chandakalamar	Tree	Misc
<i>Malvaviscus penduliflorus</i> DC.	Malvaceae	Chepu dasal	Shrub	Orn

<i>Mangifera indica</i> L.	Anacardiaceae	Maavu	Tree	Fr
<i>Manihot esculenta</i> Crantz	Euphorbiaceae	Maragenasu	Tree	Veg
<i>Manilkara zapota</i> (L.) P.Royen	Sapotaceae	Chikku	Tree	Fr
<i>Maranta arundinaceae</i> L.	Marantaceae	Araroot	Herb	Med
<i>Michelia champaca</i> L.	Magnoliaceae	Sampige	Tree	Orn
<i>Mimusops elengi</i> L.	Ebenaceae	Renjalu-mara	Tree	Fr
<i>Mirabilis jalapa</i> L.	Nyctaginaceae	Sanji mallige	Herb	Orn
<i>Momordica charantia</i> L.	Cucurbitaceae	Haagalu	Climber	Veg
<i>Momordica dioica</i> Roxb.	Cucurbitaceae	Maadu-haagala	Tree	Veg
<i>Moringa oleifera</i> Lam.	Moringaceae	Nugge-mara	Tree	Veg
<i>Musa paradisiaca</i> L.	Musaceae	Baale	Shrub	Fr
<i>Mussaenda erythrophylla</i> Schum. &Thonn	Rubiaceae	Mussanda	Shrub	Orn
<i>Mussaenda philippica</i> A.Rich	Rubiaceae	Mussanda	Tree	Orn
<i>Myristica fragrans</i> Houtt	Myristicaceae	Jaai-kaai	Tree	Med
<i>Nerium oleander</i> L.	Apocynaceae	Kanagile	Shrub	Orn
<i>Nyctanthes arbor-tristis</i> L.	Oleaceae	Paarijaata	Tree	Orn
<i>Ocimum basilicum</i> L.	Lamiaceae	Kaamakastoori	Herb	Med
<i>Ocimum sanctum</i> L.	Lamiaceae	Tulasi	Herb	Med
<i>Pandanus amaryllifolius</i> Roxb.	Pandanaceae	Biryani	Herb	Med
<i>Passiflora edulis</i> Sims.	Passifloraceae	Sharbath balli	Climber	Fr
<i>Phyllanthus acidus</i> (L.) Skeels.	Euphorbiaceae	Rajanelli	Tree	Fr
<i>Phyllanthus emblica</i> (L.)	Euphorbiaceae	Nellimara	Tree	Fr
<i>Piper betle</i> L.	Piperaceae	Vilyada ele	Climber	Med
<i>Piper longum</i> L.	Piperaceae	Hippali	Climber	Med
<i>Piper nigrum</i> L.	Piperaceae	Kaalumenasu	Climber	Med
<i>Pistia stratiotes</i> L.	Araceae	Neerugulabi	Herb	Orn
<i>Plumbago indica</i> L.	Plumbaginaceae	chitramula	Shrub	Med
<i>Plumeria obtuse</i> L.	Apocynaceae	Kaadusampige	Tree	Orn
<i>Plumeria rubra</i> L.	Apocynaceae	Gosampige	Tree	Orn
<i>Pogostemon heyneanus</i> Benth.	Lamiaceae	Pachhe tene	Herb	Med
<i>Polyalthia longifolia</i> (Sonn.) Thw.	Annonaceae	Madras ashoka	Tree	Orn
<i>Portulaca grandiflora</i> Hook.	Portulacaceae	Haali bachale	Herb	Orn
<i>Portulaca oleraceae</i> L.	Portulacaceae	Golisoppu	Herb	Veg
<i>Pseuderanthemum bicolor</i> (Schrank) R.	Acanthaceae	Motimallige	Shrub	Orn
<i>Psidium guajava</i> L.	Myrtaceae	Perale	Tree	Fr
<i>Psophocarpus tetragonolobus</i> (L.) DC.	Fabaceae	Mattiavare	Climber	Veg
<i>Punica granatum</i> L.	Punicaceae	Dalimba	Shrub	Fr
<i>Quisqualis indica</i> L.	Combretaceae	Bobaymallige	Climber	Orn
<i>Raphanus sativus</i> L.	Brassicaceae	Mullangi	Herb	Veg
<i>Rauwolfia serpentina</i> (L.) Benth.	Apocynaceae	Sarpagnidha	Shrub	Med
<i>Rauwolfia tetraphylla</i> L.	Apocynaceae	Sarpagandha	Shrub	Orn
<i>Ricinus communis</i> L.	Euphorbiaceae	Haralu oudala	Shrub	Med
<i>Rosa centifolia</i> L.	Rosaceae	Gulabi	Shrub	Orn
<i>Saccharum officinarum</i> L.	Poaceae	Kabbu	Shrub	Misc
<i>Salvia coccinea</i> Juss.	Lamiaceae	Salvia gida	Herb	Orn
<i>Sansevieria roxburghiana</i> Schult.f.	Agavaceae	Manjina naaru	Herb	Orn
<i>Sapindus laurifolius</i> Vahl.	Sapindaceae	Antuvaalakai	Tree	Med
<i>Sauropus androgynus</i> (L.) Merr.	Euphorbiaceae	Chakramani	Shrub	Veg
<i>Solanum americanum</i> Mill.	Solanaceae	Chavigida	Herb	Veg
<i>Solanum melongena</i> L.	Solanaceae	Badane	Shrub	Veg
<i>Solanum torvum</i> Sw.	Solanaceae	Gullabadane	Shrub	Veg
<i>Spondias dulcis</i> Soland	Anacardiaceae	Sihi amate	Tree	Fr
<i>Spondias pinnata</i> (L.f.) Kurz	Anacardiaceae	Huli amate	Tree	Fr
<i>Stachytarpheta jamaicensis</i> (L.) Vahl	Verbenaceae	Kaadu uttarani	Shrub	Orn
<i>Strelitzia reginae</i> L.	Srelitziaceae	Meenada Baala	Shrub	Orn
<i>Strychnos nux-vomica</i> L.	Loganiaceae	Kaasarka	Tree	Misc
<i>Syzygium aromaticum</i> (L.) Merr.&Perry	Myrtaceae	Lavanga	Tree	Med
<i>Syzygium caryophyllatum</i> (L.) Alston	Myrtaceae	Kuntu nerale	Tree	Fr
<i>Syzygium cumini</i> (L.) Skeels	Myrtaceae	Nerale	Tree	Fr
<i>Syzygium samarangense</i> (B1.) Merr.&Perry	Myrtaceae	Jambe hannu	Tree	Fr
<i>Tagetes erecta</i> L.	Asteraceae	Gonde hoovu	Shrub	Orn
<i>Tamarindus indica</i> L.	Fabaceae	Hunase	Tree	Misc
<i>Tectona grandis</i> L.f.	Verbenaceae	Saagavaani	Tree	Misc
<i>Thevetia peruviana</i> (Pers.) Merr	Apocynaceae	Karaveera	Tree	Orn
<i>Thunbergia grandiflora</i> Roxb.	Acanthaceae	Neeli Huvu	Climber	Orn
<i>Tinospora cordifolia</i> (Willd.) Hook.	Menispermaceae	Amratha balli	Climber	Med
<i>Turnera ulmifolia</i> L.	Turneraceae	Haldi Huvu	Shrub	Orn
<i>Vanilla planifolia</i> Jacks. ex Andrews	Orchidaceae	Vanilla	Climber	Orn
<i>Vitex negundo</i> L.	Verbenaceae	Nukki gida	Shrub	Med
<i>Wedelia trilobata</i> (L.) A.S.Hitchc.	Asteraceae	Kaadu sevantige	Climber	Orn
<i>Zanthoxylum rhetsa</i> (Roxb.) DC.	Rutaceae	Jummana kaai	Tree	Med
<i>Zingiber officinale</i> Roscoe	Zingiberaceae	Shunti	Herb	Med
<i>Ziziphus mauritiana</i> Lam.	Rhamnaceae	Bore hannu	Tree	Fr

categories of fruit and vegetable plants which together form only 33% of the species. 22% of the plants are mainly used for medicinal purposes. This is in contradiction to the general observation that food plants are the most common species in most home gardens throughout the world (Nair and Kumar 2006). The greater abundance of ornamental and commercial plants in the home gardens has been recognized as an indication of high levels of urbanization and modernization of the home gardening families (Karyona 1990; Drescher 1996). However, analysis of the socio-economic conditions of the home garden-owning families involved in the present study is needed to confirm this assumption.

CONCLUSION

A floristic survey of 50 home gardens of 10 different villages of Karwar, Karnataka, India has shown that a total of 210 species belonging to 69 families occur in them. Shrubs are found in maximum numbers and ornamental plants form the major use category which is a preliminary indication of greater urbanization of the study area. Palms like areca and coconut are among the most common plants in these home gardens, like the home gardens of other regions of India such as Kerala, Assam and Andamans. Further studies are needed to ascertain the socio-economic and ecological functions and structural dynamics of these home gardens.

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