

GOVERNMENT OF MAHARASHTRA



**WORKING PLAN**  
FOR THE  
**MELGHAT FORESTS**

**EAST & WEST MELGHAT DIVISIONS**

BY

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## INTRODUCTION

This Working Plan replaces the Working Plan by Sharma and Working Scheme by Bhathena. The Working Plan by Sharma was introduced in 1956-57 and the Working Scheme was prepared by Shri Bhathena in 1960 for the areas included under Miscellaneous Working Circle in the Working Plan by Sharma.

The preliminary Working Plan Report was prepared by Shri K. H. Chati, Divisional Forest Officer, Working Plans, Nagpur and Amravati Circles, Nagpur. Partial field work was carried out under the guidance of Shri K. H. Chati, Shri A. D. Mesbham and Shri A. G. Oka during their tenure as Divisional Forest Officers, Working Plans, Nagpur and Amravati Circles, Nagpur. Shri A. G. Oka also carried out the stem analysis for teak. The remaining field work was completed by undersigned.

The note written by Shri M. Y. Sowani, Director, Forest Development Board, Nagpur for discussing the exploitable size of teak in Melghat forests was used freely for drafting the Chapter 'Statistics of Growth and Yield'. I am very grateful to him for allowing the access to this note. Similarly I am thankful to Shri V. K. Mokashi, Forest Statistician, Pune for supplying the results of enumeration carried under the Forest Resources Survey Scheme in Melghat forests.

I express my deep sense of gratitude to Shri J. G. Thosre, Conservator of Forests, Working Plans, Pune and Shri D. A. Marballi who succeeded him later for their unreserved guidance and valuable suggestions given in the course of preparation and completion of the plan.

The experienced advice given by Shri D. D. Yellurkar, Conservator of Forests, Amravati Circle, Amravati, from time to time, is gratefully acknowledged. My thanks are due to Divisional Forest Officers of East and West Melghat Forest Divisions and their staff for rendering necessary assistance and co-operation for completion of the plan.

The entire staff of the division worked zealously and untiringly. The stockmapping and other field works were entrusted to the Range Forest Officers while mapping section was ably handled by the Ranger Surveyor and his team of surveyors. The staff associated with the work was :-

1. Shri M. P. Gulhane .. .. R. F. O.
2. Shri S. M. Pathan .. .. Do.
3. Shri G. B. Chinchmalatpure .. .. Do.
4. Shri K. R. Khadse .. .. Do.
5. Shri R. B. Joshi .. .. Do.
6. Shri N. M. Daksha .. .. Do.
7. Shri C. G. Singam .. .. Do.
8. Shri N. G. Kulkarni .. .. Do.
9. Shri A. B. Girhe .. .. Do.
10. Shri M. V. Kale .. .. Do.
11. Shri L. D. Purkar .. .. Ranger Surveyor.
12. Shri B. I. Mattikop .. .. Do.
13. Shri D. L. Ladsaongikar .. .. Surveyor.
14. Shri N. R. Nair .. .. Do.
15. Shri R. V. Apturkar .. .. Do.
16. Shri P. D. Ahirkar .. .. Steno-typist.
17. Shri S. C. Taiwade .. .. Do.

They all deserve commends and my sincere appreciation.

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NAGPUR :  
April 1974.  
A-431-2-A

## FOREWORD

The Melghat forests occur in the northern part of Amraoti district in a big compact block of 3053.9 Sq. km. These are valuable teak forests yielding annually handsome revenue to the State.

After assignment of Amravati district to the British in 1853 big blocks of compact tree forests were selected, demarcated and constituted into reserved forests. Upto 1886 they were given complete rest and were protected from fire, grazing, illicit cutting and shifting cultivation. Regular management of these forests started from 1893 when the first working plan was prepared under which improvement fellings were prescribed for the important blocks of Bairagarh and Gugamal reserves. This plan was revised in 1915-16. In 1935, third plan after detailed stockmapping, stem analysis and collection of required data was prepared by Stein. It was in force till 1956 when the 4th Working Plan prepared by Sharma was introduced. Sharma's Plan and Working Scheme by Bhatthana have been replaced by this working plan.

Since preparation of Sharma's plan, changes of far-reaching importance in economic and developmental fields had taken place. The value of forest produce greatly increased and large quantity of unsaleable forest produce became saleable. Therefore, preparation of new Working Plan for Melghat forests was taken up. While preparing new Working Plan stock-maps were carefully examined and corrected, stocking of different species was determined by carrying out enumerations and growth data of teak was collected by stem analysis. Besides these, market rates and other important statistics were collected.

Keeping in view the objects of management, information collected and seeing the results of Sharma's plan, future management for Melghat forests has been laid down in this plan. It is expected that the new plan will not only increase the yield of all kinds of forest produce but also will improve the forests making them capable of yielding better revenue.

PUNE.

J. G. THOSRE,  
Conservator of Forests,  
Working Plans Circle.



## SUMMARY OF THE WORKING PLAN FOR MELGHAT FOREST DIVISION, AMRAVATI CIRCLE, MAHARASHTRA

FOR THE PERIOD FROM 1975-76 TO 1984-85

### PART I

#### The Tract :

This Working Plan covers the entire forests of East Melghat Forest Division and West Melghat Forest Division. The forests area situated on the southern branch of the Satpuda range known as the Gawilgarh hills. The total area of the forests is 3053.93 sq. km. On its north, east and west are sparsely populated forest tracts while the open Berar plains lie immediately to the south. The tract is hilly. In summer acute shortage of water is felt. The climate is generally unhealthy.

#### Rights and Concessions :

The forests are not burdened with rights. Numerous concessions are, however, allowed to *rayatwari* and forest villagers.

#### Description of the forest :

The forests belong to "Southern Tropical Dry Deciduous forests" type. In most of the forests teak is the prominent species. *Tiwas*, *salai*, *dhaora*, *haldu* and *saj* are the other common species. *Tiwas* is predominant at high elevations and *salai* in the comparatively drier southern and western parts of the tract. Rusa grass occurs mostly in the southern part of West Melghat Division.

Teak percentage in the forests varies from 28 to 51. The areas of teak forests according to Maharashtra quality are II quality 29.74 sq. km., III quality 1211.67 sq. km., IV a quality 191.52 sq. km. and IVb quality 49.60 sq. km.

Bamboos occur over about 521.43 sq. km. and rusa grass concentration is more in the southern and western parts of West Melghat Division.

#### Markets :

All timber is extracted departmentally and sold periodically by public auctions at the established Govt. timber depots at Paratwada, Dharni, Akot and Semadoh from where most of the timber is exported to the timber consuming centres in the country. Firewood and bamboos are extracted on rated passes and are generally sold in weekly *bazars* in the Berar plains.

#### Labour supply :

The tract is very sparsely populated. The residents of Berar plains are averse to forest works. There is, therefore, a chronic shortage of labour. The local population mostly consists of *korkus*, *gaolis* and *mahals*.

#### Past History :

The management of reserve forest of Melghat prior to 1893, chiefly concerned with giving them rest from past ill treatment. Improvement fellings of large unsound teak were carried out in the Chaurakund, Semadoh, Butrum blocks of Bairagarh reserve. In 1893—1915 Working Plan for the Bairagarh reserves and Gugamal reserves completed by Bagshawe, under which Improvement fellings were prescribed for Bairagarh reserves and by a Working scheme for Gugamal reserve introduced in 1910-11 improvement fellings were only prescribed. For Tapti reserves a Working Scheme 1912-13, fellings under coppice with standards system was introduced. Dunbar Brander's Working Plan 1915-16 to 1935-36 covering the whole Melghat Division introduced 4 Working Circles viz. the High Forest, the Coppice with Standards, the Unregulated and Bamboo Working Circle. The High Forest Working Circle covering whole of Bairagarh, Gugamal and Kohana reserves. Tapti reserve being covered by Coppice with Standard and the remaining under Unregulated Working Circle. Stein's Working Plan (1935—55) covered the whole forests except Dhulghat, Wan, Dabida and part of Rupagarh block and two 'C' class blocks. His working plan had 4 working circles. Teak High Forest Working Circle including almost the whole of Bairagarh and Gugamal Reserves, Coppice Working Circle including Tapti, Chithri, Bod, Jhapnadeo, Chikhali, parts of Motha and Chikhaldara, Khirpani and Rupagarh reserves, Miscellaneous Working Circle including all the forest which are unworkable due to poor quality and stocking, remoteness or inaccessible. Forest village and 'C' class were also allotted to this Working Circle. Bamboo over lapping Working Circle was also formed.

Under Sharma's Plan, the better quality forests were worked under Selection system while the coppice with reserves system was continued in comparatively poorer quality forests. The remote and understocked forests were not subjected to any type of regular working. Only in 1960 under Bhatena's Scheme a regular working was introduced with coppice with reserves system in slightly better quality areas from these remote forests for which no regular working was prescribed under Sharma's Plan.

**Statistics of growth :**

The stem analysis indicates that teak attains a girth of 120 cm. (b.h.o.b.) in about 84 years. Enumeration results that are computed according to the working Circles in Sharma's Plan and Bhatena's Scheme give the number of trees per hectare as below :—

Working Circle	Number of trees per ha.		
	Teak	Other	Total
Selection	135	142	277
C. W. R.			
(i) Sharma's Plan	133	165	298
(ii) Bhatena's Scheme	87	172	259
Miscellaneous	73	182	252

In Selection Working Circle, teak trees above 120 cm. girth are 8.6/ha. and in 105 U 120 cm. girth class the number is 6.5/ha. According to the rate of growth teak trees of 105 U 120 cm. girth class shall pass over to above 120 cm. girth class in 17 years. The estimated annual yield of teak trees above 120 cm. girth in Selection Working Circle is 43850 M<sup>3</sup>.

A comparison of stocking of teak trees in Selection Working Circle with those according to yield table reveals that the present stocking of teak trees is 50 per cent less.

**PART II**

The objects of management are—

1. To preserve forests on the steep hill sides and area stocked with open forests to prevent erosion and rapid run off.
2. To satisfy the local demands of forest produce and grazing.
3. To ensure the maximum sustained yield of forest produce in demand.
4. To increase the valuable growing stock.

Period of the plan : Ten years from 1975 to 1984.

The salient prescriptions of the plan are as follows :—

**I—SELECTION WORKING CIRCLE**

Area—179916.3 ha.

*Choice of species.*—Teak is the principal species. *Shisham, bija, tiwas, haldu* and *saja* will receive attention, *Semal* and *kulu* will be reserved in all sizes.

*Felling cycle.*—20 years ; exploitable girth : 120 cm. at b. h.

*Felling Series.*—35.

*Regulation of yield :* Yield will be regulated by area.

*Marking rules.*—All trees of and above 120 cm. in girth will be exploited if available silviculturally. Improvement fellings and thinnings will be carried out in the rest of the crop.

*Plantations.*—Teak plantation over not less than 5 ha. will be carried out. Old plantations will be thinned suitably.

*Subsidiary cultural operations.*—Cleaning and thinning will be carried out in the 6th and 10th year respectively.

**II—COPPICE WITH RESERVE WORKING CIRCLE**

Area—49125.8 ha.

*Choice of species.*—Teak is the main species. Other species to receive preference are *shisham, bija, tiwas, haldu, saja* and *dhaora*. *Semal* and *kulu* will not be felled.

*Rotation.*—40 years.

*Felling series.*—13.

*Regulation of yield.*—Yield will be regulated by area.

*Marking Rules.*—Fully stocked areas will be clearfelled retaining well grown poles in groupes and advance growth. Understocked area will not be worked.

*Plantation.*—Teak plantation will be carried out at least in 4 ha.

*Subsidiary cultural operations.*—Cleaning in the 6th year and thinnings in 20th year will be carried out.

**III—IMPROVEMENT WORKING CIRCLE**

Area—35925.6 ha.

*Choice of Species.*—Teak is the main species. Other important species are *semal, kulu, saja, tinsa* and *salai*.

*Felling cycle.*—15 years.

*Felling series.*—7.

*Marking rules.*—Only improvement fellings will be carried out. Teak reproduction will be freed.

*Plantation.*—Teak and *tendu* plantations will be carried out over at least 2 ha.

IV—PROTECTION WORKING CIRCLE

Area—16780.9 ha.  
No regular working is prescribed for these forests.

V—MISCELLANEOUS WORKING CIRCLE

Area—23644.4 ha.  
'C' class forests and minor forests which are unworkable at present due to poor stocking are included under this working circle. No regular working is prescribed for these forests.

VI—BAMBOO OVERLAPPING WORKING CIRCLE

Bamboo area—52142.8 ha.  
Cutting cycle—3 years.  
Cutting series—19.  
*Cutting rules.*—The clumps will be cleaned and thinned. The culms of under one year will not be cut and minimum 8 mature culms will be retained. The clumps will not be worked during rainy season.

VII—RUSA GRASS WORKING CIRCLE

Area—253916.7 ha.  
Cutting series—2.  
Each cutting series has been divided into 4 cutting sections. One cutting section in turn will be given rest for one year.  
*Plantation.*—Rusa grass plantation over 10 ha. will be raised, annually.

VIII—MISCELLANEOUS REGULATIONS

*Disposal of Forest Produce.*—All timber will be extracted departmentally to the established Government timber depots, where it will be sold by public auctions. Firewood and bamboos will be extracted on rated passes. Rusa grass from plantations may be exploited departmentally. From other areas it will be exploited through the agency of contractors. Right to collect other important minor forest produce will be sold by auction.

*Irregular exploitation.*—The removal of dry fuel on passes is permitted from all parts of the forest.

*Forest protection.*—Complete fire protection for the whole forest except 'C' class forest has been prescribed

*Grazing.*—The forests are divided into 19 grazing units to which villages have been listed for grazing their cattle.

Worked coupes in Selection and Improvement. Working Circles for 3 years and in C. W. R. Working Circle for 5 years will remain close for grazing. In Miscellaneous Working Circle certain areas will be closed for grazing for 3 years. No grazing is allowed in Protection Working Circle. Plantations will remain close to grazing for a period of 10 years.

*Establishment.*—Additional staff is required for proper execution of the prescriptions of the plan.

*Labour.*—The present labour supply is inadequate.

## I. ABBREVIATIONS USED IN THE PLAN

b. h.	..	..	..	..	..	breast height.
B & C. Department	..	..	..	..	..	Building and Communication Department.
C. A. I.	..	..	..	..	..	current annual increment.
cft.	..	..	..	..	..	cubic feet.
cm.	..	..	..	..	..	centimetre.
comptt.	..	..	..	..	..	compartment.
contd.	..	..	..	..	..	continued.
d. b. h. u. b.	..	..	..	..	..	diameter at breast height under bark.
d. b. h. o. b.	..	..	..	..	..	diameter at breast height over bark.
Dn.	..	..	..	..	..	division.
F. S.	..	..	..	..	..	felling series.
F. V.	..	..	..	..	..	forest village.
g. b. h.	..	..	..	..	..	girth at breast height.
ha.	..	..	..	..	..	hectare.
inch.	..	..	..	..	..	inches.
km.	..	..	..	..	..	kilometre.
m.	..	..	..	..	..	metre.
M <sup>3</sup>	..	..	..	..	..	cubic-metre.
M. A. I.	..	..	..	..	..	mean annual increment.
Mah.	..	..	..	..	..	Maharashtra.
(P)	..	..	..	..	..	part.
P. B.	..	..	..	..	..	Periodic block.
R. H.	..	..	..	..	..	Rest House.
Rs.	..	..	..	..	..	rupees.
Sq.	..	..	..	..	..	square.
U.	..	..	..	..	..	under
W. C.	..	..	..	..	..	Working Circle.
Yrs.	..	..	..	..	..	Years.

## II. GLOSSARY OF LOCAL TERMS USED IN THE PLAN

<i>Ara</i>	..	..	..	..	A roughly fashioned piece of timber suitable for making into a spoke, also a pole of medium girth suitable for use as a ridge-piece or bressumerr in house construction.
<i>Bakhar</i>	..	..	..	..	A hoe.
<i>Balla</i>	..	..	..	..	A plateau.
<i>Balli</i>	..	..	..	..	A thin pole suitable for use as a rafter.
<i>Bidi</i>	..	..	..	..	A cigarette prepared by rolling dried leave generally of <i>tendu</i> ( <i>Diospyros melanoxylon</i> ).
<i>Dahya</i>	..	..	..	..	Shifting cultivation.
<i>Dengri</i>	..	..	..	..	As short pole between 30 cm. and 45 cm. in girth and under 2.5 m. in length suitable for use as a fencing post.
<i>Dhar</i>	..	..	..	..	A narrow ridge.
<i>Doh</i>	..	..	..	..	A deep pond in a stream or river.
<i>Geru</i>	..	..	..	..	A paint prepared from red chalk.
<i>Ghat</i>	..	..	..	..	A road with a steep gradient or a ford on a river; a ridge.
<i>Ghor</i>	..	..	..	..	A sharp spur or narrow ridge.
<i>Heti</i>	..	..	..	..	A cattle camp.
<i>Jagir</i>	..	..	..	..	An estate conferred by the State in return for services.
<i>Jagiridar</i>	..	..	..	..	The holder of a <i>jagir</i> .
<i>Kamdar</i>	..	..	..	..	A village servant.
<i>Katcha</i>	..	..	..	..	Unmetalled (of a road); temporary.
<i>Khandi</i>	..	..	..	..	A saddle or col.
<i>Khora</i>	..	..	..	..	A deep valley.
<i>Lakh</i>	..	..	..	..	A hundred thousand.
<i>Mahout</i>	..	..	..	..	An elephant driver.
<i>Mandawa, Mala</i>	..	..	..	..	A wooden shelter or shed constructed for a temporary purpose such as watching crops.
<i>Murram</i>	..	..	..	..	A reddish hard soil.
<i>Nagar</i>	..	..	..	..	A Plough.
<i>Padao</i>	..	..	..	..	A camping ground or a place where timber is collected for export.
<i>Patel</i>	..	..	..	..	A headman of a village.
<i>Putha</i>	..	..	..	..	A roughly fashioned piece of timber suitable for making into a felloe.
<i>Raiyatwari</i>	..	..	..	..	A form of land tenure, applied to land in <i>raiyatwari</i> tenure and to villagers holding such land.
<i>Ramna</i>	..	..	..	..	A grass reserve.
<i>Satkata</i>	..	..	..	..	Miscellaneous trees.
<i>Shikar</i>	..	..	..	..	Hunting.
<i>Tahsil</i>	..	..	..	..	A part of civil district formed for administrative purposes.
<i>Tatta</i>	..	..	..	..	A mat, usually made from split bamboos but occasionally from twigs of <i>Vitex negundo</i> .
<i>Warli</i>	..	..	..	..	A rectangular boundary cairn.

## BOTANICAL AND LOCAL NAMES OF PLANTS

Note.—(i) H—Hindi; M—Marathi; K—Korku; E—English. V. A.—Very abundant; A—Abundant; F—Frequent; O—Occasional; R—Rare; V. R.—Very rare; L—Local (prefixed to any of the above).

Local Names (1)	Botanical Names (2)	Remarks (3)	
A.—Trees			
<i>Amta</i> , H. .. ..	<i>Bauhinia malabarica</i> , Roxb. .. ..	O.	
<i>Ambotha</i> , K. .. ..			
<i>Amaltas</i> , H. .. ..		<i>Cassia fistula</i> , Linn. .. ..	F.
<i>Apta</i> , M. .. ..	<i>Bauhinia racemosa</i> , Lamk. .. ..	F.	
<i>Aonla</i> , H. .. ..	<i>Emblica officinalis</i> , Gaertn. .. ..	V. A.	
<i>Aonla</i> , M. K. .. ..			Syn. <i>Phyllanthus emblica</i> , Linn. .. ..
<i>Anjan</i> , H.M.K. .. ..			<i>Hardwickia binata</i> , Roxb. .. ..
<i>Arang</i> , K. .. ..	<i>Kydia calycina</i> , Roxb. .. ..	L. F. Dabida reserve.	
	<i>Eriolaena hookeriana</i> , W. and A. .. ..		
<i>Am</i> , H. K. .. ..	<i>Mangifera indica</i> , Linn. .. ..	F.	
<i>Amba</i> , M. .. ..	<i>Morinda tinctoria</i> , Roxb. .. ..	L. O.	
<i>Ahl</i> , H. M. .. ..			
<i>Ambada</i> , M. .. ..			<i>Spondiam pinnata</i> (Linn. f.) .. ..
	Kurz. .. ..		
	Syn. <i>Spondias mangifera</i> , Willd. .. ..		
<i>Ain</i> , M. .. ..	<i>Terminalia tomentosa</i> , W. and A. .. ..	A.	
<i>Achar</i> , H. M. .. ..	<i>Buchanania lanzan</i> , Spreng. .. ..	F.	
	Syn. <i>Buchanania latifolia</i> Roxb. .. ..		
<i>Babul</i> , H. M. K. .. ..	<i>Acacia arabica</i> , Willd. .. ..	R.	
<i>Bel</i> , H.M. .. ..	<i>Aegle marmelos</i> , Correa .. ..	F.	
<i>Bela</i> , K. .. ..			
<i>Bhosa</i> , K. .. ..			
<i>Bahawa</i> , M. .. ..	<i>Cassia fistula</i> , Linn. .. ..	F.	
<i>Bhanaka-bongru</i> , K. .. ..			
<i>Baru</i> , K. .. ..			
<i>Bhirra</i> , H. M. K. .. ..	<i>Schleichera oleosa</i> , (Lour) Oken .. ..	F.	
	Syn. <i>Schleichera trijuga</i> , Willd. .. ..		
<i>Bhoti</i> , H. .. ..	<i>Chloroxylon swietenia</i> , D. C. L. A. .. ..	Kohana, Behali.	
<i>Bhondia-dhaman</i> , M. .. ..			
<i>Bar</i> , H. .. ..			
<i>Banyan</i> , E. .. ..	<i>Ficus bengalensis</i> , Linn. .. ..	F.	
<i>Bhorsal</i> , M. K. .. ..	<i>Hymenodictyon excelsum</i> , Wall. .. ..	R.	
<i>Barga</i> , H. .. ..	<i>Kydia calycina</i> , Roxb. .. ..	A.	
<i>Bhoti</i> , K. .. ..			
<i>Bakain</i> , H. M. K. .. ..			
<i>Bija</i> , H. M. .. ..	<i>Melia azedarach</i> , Linn. .. ..	V. R.	
<i>Bhilawa</i> , H. .. ..	<i>Pterocarpus marsupium</i> Roxb. .. ..	O.	
	<i>Semecarpus anacardium</i> , Linn. f. .. ..		
<i>Biba</i> , M. .. ..	<i>Semecarpus anacardium</i> , Linn. f. .. ..	F.	
<i>Bahera</i> , H. M. K. .. ..			
<i>Ber</i> , H. .. ..			
<i>Bor</i> , H. M. K. .. ..	<i>Terminalia bellerica</i> Roxb. .. ..	A.	
<i>Baringa</i> , K. .. ..	<i>Zizyphus jujuba</i> , Lamk. .. ..	A.	
	<i>Boria</i> , K. .. ..		
<i>Chichwa</i> , M. .. ..	Syn. <i>Zizyphus mauritiana</i> , Lamk. .. ..	V. A.	
<i>Chichlor</i> , K. .. ..	<i>Grewia tiliacifolia</i> , Vahl. .. ..		
<i>Chapa</i> , K. .. ..	<i>Glochidion velutinum</i> , Wight .. ..		
<i>Char</i> , H. M. .. ..	<i>Albizzia Odoratissima</i> , Benth. .. ..	L. F. Chikhaldia.	
<i>Chirohol</i> , H. .. ..	<i>Bauhinia Variegata</i> , Linn. .. ..	L. F.	
	<i>Chilla</i> , K. .. ..		
<i>Chakrej</i> , K. .. ..	<i>Buchanania lanzan</i> , Spreng. .. ..	F.	
<i>Chandan</i> , H. M. K. .. ..	Syn. <i>Buchananina latifolia</i> , Roxb. .. ..		
<i>Choso</i> , K. .. ..	<i>Holoptelea integrifolia</i> , X. .. ..	O.	
	<i>Chirohol</i> , H. .. ..		
<i>Chilla</i> , K. .. ..	Planch. .. ..	V. A.	
<i>Chakrej</i> , K. .. ..	<i>Lagerstroemia parviflora</i> , Roxb. .. ..		
<i>Chandan</i> , H. M. K. .. ..	<i>Santalum album</i> Linn. .. ..		
<i>Choso</i> , K. .. ..	<i>Semecarpus anacardium</i> , Linn. f. .. ..	V. R. Gawilgarh Fort.	
		F.	

Local Names (1)	Botanical Names (2)	Remarks (3)
A—Trees—contd.		
Chinch, M. .. ..	<i>Tamarindus indica</i> .. .. .	O.
Chicha, K. .. ..		
Chawar, K. .. ..	<i>Sterculia colorata</i> , Roxb. .. .. .	L. O. Chikhaldia.
Chaura, K. .. ..		
Dhaora, H. M. K. ..	<i>Anogeissus latifolia</i> , Wall. .. .. .	V. A.
Dahi-palas, M. ..	<i>Cordia macleodii</i> , H. F. and Th. .. .. .	L. O.
Dhoban, H. .. ..	<i>Dalbergia paniculata</i> , Roxb. .. .. .	A.
Dhuman, H. M. K. ..	<i>Grewia tiliaefolia</i> , Vahl. .. .. .	V. A.
Dhuman, K. .. ..	<i>Grewia orbiculata</i> , Rotter .. .. .	V. R.
Dudhi, H. .. ..	<i>Holarrhena antidysenterica</i> , Wall .. .. .	F.
Dudhi, H. .. ..	<i>Wrightia tinctoria</i> , A. Br. .. .. .	V. R.
Dudiya, K. .. ..		
Dudhi, H. .. ..	<i>Wrightia tomentosa</i> , Roem. and Sch. .. .. .	V. R.
Dudhari, K. .. ..		
Goria nim, K. .. ..	<i>Cedrela toona</i> , Roxb. .. .. .	L. O. Chikhaldia Bairat Makhla.
Gabdi, H. .. ..	<i>Cochlospermum gossypium</i> , D. C. A. .. .. .	Dhulghat.
Gongal, M. .. ..		
Ganer, M. .. ..		
Ganer, K. .. ..		
Gular, H. .. ..	<i>Erythrina suberosa</i> , Roxb. .. .. .	L. A.
Goraghoti, K. .. ..	<i>Ficus glomerata</i> , Roxb. .. .. .	A.
	<i>Flacourtia ramontchi</i> , L. .. .. .	F.
	Herit.	
Ghetu, K. .. ..	<i>Randia dumetorum</i> , Lamk. .. .. .	F.
Ghangru, K. .. ..	<i>Randia uliginosa</i> , D. C. .. .. .	O.
Ghatbor, M. K. ..	<i>Zizyphus xyjopyra</i> , Willd. .. .. .	A.
Ghota, K. .. ..		
Gondan, M. .. ..		
	<i>Cordia dichotoma</i> , Forst } .. .. .	V. R. Koktu.
	Syn. <i>Cordia myxa</i> , Linn. }	
Hiwar, M. .. ..	<i>Acacia leucophloea</i> , Willd. .. .. .	L. O.
Haldu, H. M. K. ..	<i>Adina cordifolia</i> , Hook, f. .. .. .	A. and L. V. A.
Homba, M. K. .. ..	<i>Sacopetalum tomentosum</i> .. .. .	A.
	H. f. and Th.	
Harra, H. .. ..	<i>Terminalia chebula</i> , Retz. .. .. .	L. A.
Hilda, M. K. .. ..		
Hirda, M. K. .. ..		
Imli, H. .. ..	<i>Tamarindus indica</i> .. .. .	O.
Jamrassi, H. M. ..	<i>Elaeodendron glaucum</i> , Pers. .. .. .	O.
Jamun, H. .. ..	<i>Eugenia cumini</i> (Linn.), Dru. } .. .. .	L. A.
Jambhul, M. .. ..		
Jambu, K. .. ..	<i>Schrebera swietenoides</i> , Roxb. .. .. .	A.
Jhan, K. .. ..	<i>Randia uliginosa</i> , D. C. .. .. .	O.
Kala dhendra, H. ..	<i>Acacia catechu</i> , Willd. .. .. .	L. F. occurs in open dry forest and frost areas.
Khair, H. M. K. ..		
Kinhi, M. K. .. ..	<i>Albizia procera</i> , Benth .. .. .	O.
Khatua, H. .. ..	<i>Antidesma diandrum</i> , Roth. .. .. .	R.
Katumba, K. .. ..		
Keolar, H. .. ..	<i>Bauhinia purpurea</i> , Linn. .. .. .	L. A.
Keolari, K. .. ..		
Kachnar, H. .. ..	<i>Bauhinia variegata</i> , Linn. .. .. .	L. F.
Khatsawar, M. ..	<i>Bombax malabaricum</i> , O. C. } .. .. .	O.
Kasai, H. .. ..	<i>Bridelia retusa</i> , spr. .. .. .	A.
Katnyen, M. .. ..		
Karkha, K. .. ..		
Kumbhi, H. M. K. ..	<i>Careya arborea</i> , Roxb. .. .. .	C. and L. A. The latter on high plateau X.

Local Name (1)	Botanical Name (2)	Remarks (3)
A—Trees—contd.		
Kesa, K. .. ..	<i>Casearia tomentosa</i> , Roxb. .. ..	A.
Karanleo, K. .. ..	<i>Dolichandrone crispera</i> , Seem. .. ..	R.
Korela <sup>wa</sup> , K. .. ..	<i>Ficus cunia</i> , Ham. .. ..	R.
Korela <sup>wa</sup> , K. .. ..	<i>Ficus hispida</i> , Linn. .. ..	R.
Karkai, M. .. ..	<i>Flacourtia ramontchi</i> , L. .. ..	E.
	Herit.	
Zakar, H. .. ..	<i>Garuga pinnata</i> , Roxb. .. ..	A.
Kekda. .. ..		
Kolya, K. .. ..	<i>Glochidion velutinum</i> Wight .. ..	L. F. Chikhalda.
Kolsa, K. .. ..		
Kasmar, K. .. ..	<i>Gmelina arborea</i> , Roxb. .. ..	O.
Kuda, M. .. ..	<i>Holarrhena antidysenterica</i> .. ..	F.
Kurakat, K. .. ..	Wall.	
Karanjalum, K. .. ..	<i>Holoptelea integrifolia</i> , Planch .. ..	O.
Kukum, K. .. ..	<i>Mallotus philippinensis</i> , Muell .. ..	O.
Kari, H.M.K. .. ..	<i>Miliusa velutina</i> , H. f. and Th. .. ..	O.
Kalam, M. .. ..	<i>Mitragyna parvifolia</i> , Korth .. ..	F.
Kuram, K. .. ..		
Kurumbo, K. .. ..	Syn: <i>Stephegyne parvifolia</i> , Korth.	
Kari, H. .. ..	<i>Saccopetalum tomentosum</i> , H. f. and Th. .. ..	O.
Kusum, H. .. ..	<i>Schleichera oleosa</i> (Lour), Merr. .. ..	F.
Kusumb, M. .. ..	Syn. <i>Schleichera trijuga</i> , Willd. .. ..	
Katamba, K. .. ..	<i>Spondias pinnata</i> (Linn. f.) .. ..	V. R.
	Kurz.	
	Syn. <i>Spondias mangifera</i> , Willd.	
Kulu, H. M. .. ..	<i>Sterculia urens</i> ; Roxb. .. ..	A.
Karhai, H. M. .. ..		
Kudal, K. .. ..	<i>Sterculia villosa</i> , Roxb. .. ..	R.
Kuthada, K. .. ..		
Kalatetu, K. .. ..	<i>Stereospermum xylocarpum</i> , B-enth .. ..	L. O. Chikhalda Bai-rat.
Kahu, H. .. ..	<i>Terminalia arjuna</i> , Bedo .. ..	L. A.
Kowa, K. .. ..		
Khudaibidi, K. .. ..	<i>Trema orientalis</i> , Bl. .. ..	O.
Kura, K. .. ..	<i>Wrightia tinctoria</i> , A. Br. .. ..	A.
Limbori, K. .. ..	<i>Azadirachta indica</i> , A. Juss. .. ..	
Lasora, H. .. ..	<i>Cordia dichotma</i> , Forst. .. ..	V. R. Koktu.
	Syn. <i>Cordia myxa</i> , Linn. .. ..	
Laurikasmar, K. .. ..	<i>Cordia macleodii</i> , H. f. & Th. .. ..	L. O.
Lawa, K. .. ..	<i>Ficus glomerata</i> , Roxb. .. ..	A.
Lokhanci, M. K. .. ..	<i>Ixora parviflora</i> , Vahl. .. ..	L. A.
Lendia, J. M. .. ..	<i>Lagerstroemia parviflora</i> , .. ..	V. A.
Lenia, K. .. ..	<i>Litsoea sebifera</i> , Pers. .. ..	R. Higher elevations.
Maharuk, H. M. .. ..	<i>Ailanthus excelsa</i> , Roxb. .. ..	R.
Marukha, K. .. ..		
Medsing, H. M. .. ..	<i>Dolichandrone falcata</i> , Seem .. ..	R.
Mohin, H. M. K. .. ..	<i>Lannea grandis</i> , Engl. .. ..	A.
Moyen, H. .. ..		
Mohi, H. M. K. .. ..	Syn. <i>Odina woodier</i> , Roxb. .. ..	
Maidalkri, H. .. ..	<i>Litsoea sebifera</i> , Pers. .. ..	R. Higher elevation.
Mahua, H. .. ..	<i>Madhuca latifolia</i> , Roxb. .. ..	
Mohwa, M. .. ..	Macbride. .. ..	F.
Mu, Moha, K. .. ..	Syn. <i>Bassia latifolia</i> .. ..	
Mango, E. .. ..	<i>Mangifera indica</i> , inn. .. ..	F.
Mainhar, H. .. ..	<i>Randia dumetorum</i> , Lamk .. ..	F.
Mainphal, H. .. ..		
Mokha, H. M. .. ..	<i>Schrebera swietenoides</i> , Roxb. .. ..	A.
Nim, H. M. .. ..	<i>Azadirachta indica</i> , A. .. ..	L. O. occurs in southern foot hills.
	Juss. .. ..	
Nazarijat, K. .. ..	<i>Dolichandrone falcata</i> Seem .. ..	R.



Local Name (1)	Botanical Name (2)	Remarks (3)
A—Trees—contd.		
Niru, K. .. ..	<i>Elaeodendron glaucum</i> , Pers. .. ..	O.
Nagthada, K. .. ..	<i>Erythrina suberosa</i> , Roxb. ... ..	L. A.
Palas, H. M. .. ..	<i>Butea frondosa</i> , Roxb. .. ..	L. A.
Pharsa, K. .. ..		
Phangra, K. .. ..	<i>Cochlospermum gossypium</i> , D. C. .. ..	A. Dhulghat.
Phansi, M. .. ..	<i>Dalbergia paniculata</i> Roxb. ... ..	A.
Passi, K. .. ..		
Padar, M. .. ..	<i>Dolichandrone crispa</i> Seem. .. ..	O.
Phangra, M. .. ..	<i>Erythrina suberosa</i> , Roxb. ... ..	L. A.
Pakar, H. M. .. ..	<i>Ficus infectoria</i> , Roxb. .. ..	O.
Pipri, K. .. ..		
Pipal, H. M. .. ..	<i>Ficus religiosa</i> , Linn. .. ..	
Pipari, K. .. ..	<i>Gardenia turgida</i> , Roxb. .. ..	O.
Phendra, M. .. ..		
Phetra, M. .. ..		
Purputta, K. .. ..		
Phulgatetu, K. .. ..	<i>Oroxylum indicum</i> , Vent. .. ..	R.
Phulangatetu, K. .. ..	<i>Randia uliginosa</i> , D. C. .. ..	O.
Putpuyys, K. .. ..		
Pinj, M. .. ..	<i>Sterculia colorata</i> , Roxb. .. ..	V. R. Chikhalda.
Padar, H. M. K. .. ..	<i>Stereospermum chelonoides</i> , D. C. .. ..	R.
Padar, H. M. K. .. ..	<i>Stereospermum suaveolens</i> , D. C. .. ..	O.
Rawa chachu, K. .. ..	<i>Acacia lenticularis</i> , Ham. .. ..	
Rounjha, H. .. ..	<i>Acacia leucophloea</i> , Willd. .. ..	L. O.
Hinjara, K. .. ..	<i>Casearia graveolens</i> , Dalz. .. ..	A.
Riwit, K. .. ..		
Rori. .. ..	<i>Mallotus philippinensis</i> , Muell. .. ..	O.
Ruthu, K. .. ..	<i>Ougeinia dalbergioides</i> , Benth. .. ..	V. A.
Rohan, M. .. ..	<i>Soymida febrifuga</i> , A. Juss. .. ..	O.
Rohani, M. K. .. ..	<i>Albizzia procera</i> , Benth. .. ..	O.
Safed sirs, H. .. ..		
Sagon, H. .. ..	<i>Tectona grandia</i> , Linn. .. ..	V. A.
Sag. Sagwan M. .. ..		
Sipna, K. .. ..		
Saj, H. .. ..		
Sadram. M. .. ..	<i>Terminalia tomentosa</i> , W. and A. .. ..	A.
Sirs, H. .. ..	<i>Albizzia Odoratissima</i> , Benth. .. ..	O.
Sitaphal, H. K. .. ..	<i>Anona squamosa</i> . Linn. .. ..	L. F. occurs near Khatkali in Khirpani Range.
Semal, H. .. ..	<i>Bombax malabaricum</i> , D. C. .. ..	O.
Saori, K. .. ..		
Salai, H. M. K. .. ..	<i>Boswellia serrata</i> , Roaxb. .. ..	V. A.
Silu, K. .. ..	<i>Cordia dichotoma</i> , Forest. .. ..	V. R. Koktu.
	Syn. <i>Cordia myxa</i> , Linn. .. ..	
Shsham, H. M. .. ..	<i>Dalbergia latifolia</i> , Roxb. .. ..	O.
Sisoo, K. .. ..	<i>Gmelina arborea</i> Roxb. .. ..	O.
Shewan, M. .. ..		
Shendri, M. .. ..	<i>Mallotus philippinensis</i> , Muell. .. ..	O.
Sejna, H. K. .. ..	<i>Moringan oleifera</i> , Lamk. .. ..	R.
Shewaja, M. .. ..	Syn. <i>Moringa pterygosperma</i> . .. ..	
Shindi, M. .. ..	<i>Phoenix sylvestris</i> , Roxb. .. ..	R.
Sendhi, K. .. ..	<i>Buchanania lanzan</i> , spreng. .. ..	F.
Tarop, K. .. ..		
	Syn. <i>Buchanania latifolia</i> , Roxb. .. ..	
Tun, H. .. ..	<i>Cedrela toona</i> , Roxb. .. ..	L. O. Chikhalda Bairat, Kakhla.
Tendu, H. .. ..	<i>Diospyros melanoxylon</i> , Roxb. .. ..	F. and L. A.
Tembru, M. K. .. ..		
Tembhurni, M. K. .. ..		

Local Name (1)	Botanical Name (2)	Remarks (3)
<b>A—Trees—contd.</b>		
Tetu, K. .. ..	<i>Dolichandrone crista</i> , Seem. .. ..	O.
Thuar, H. M. K. .. ..	<i>Euphorbia nivulia</i> , Ham. .. ..	L. A. Rocky steep and precipitious slopes.
Tetu, K. .. ..	<i>Oroxylum indicum</i> , Vent. .. ..	R.
Tetu, K. .. ..	<i>Stereospermum xylocarpum</i> , Benth. .. ..	L. O. Chikhalda Bairat.
Tinsa, H. .. ..	<i>Ougeinia dalbergioides</i> , Benth. .. ..	V. A.
Twas, M. .. ..	Syn. <i>Ougeinia ougeinensis</i> .	
Teklet, K. .. ..	<i>Sterculia urens</i> , Roxb. .. ..	A.
Teak, E. .. ..	<i>Tectona grandis</i> , Linn. .. ..	V. A.
Thoar, K. .. ..	<i>Trema orientalis</i> , Bl. .. ..	O.
Thori, K. .. ..		
Thoar, K. .. ..	<i>Trema politoria</i> , Planch .. ..	O.
Thori, K. .. ..		
Turat, K. .. ..		
Tilwan, H. K. .. ..	<i>Wendlandia exserta</i> , D. C. .. ..	V. R.
Umbar, M. .. ..	<i>Ficus glomerata</i> , Roxb. .. ..	A.
War, M. .. ..	<i>Ficus bengalensis</i> , Linn. .. ..	F.
Wora, K. .. ..		
Wal, K. .. ..	<i>Morinda tinctoria</i> , Roxb. .. ..	L. O.
<b>B—Shrubs</b>		
Bhandar, K. .. ..	<i>Colebrookia oppositifolia</i> , Smith .. ..	L. A.
Babarang, H. .. ..		
Brengel, K. .. ..	<i>Embelia robusta</i> , Roxb. .. ..	L. A.
Bharangeli, K. .. ..		
Bharati, M. K. .. ..	<i>Gymnosporia montana</i> , Law .. ..	L. O.
Bholari, K. .. ..		
Birhol, H. .. ..	<i>Indigofera pulchella</i> , Roxb. .. ..	L. F.
Banda, H. K. .. ..	<i>Loranthus scurrula</i> , Linn. .. ..	R.
Banda, H. K. .. ..	<i>Loranthus longiflorus</i> , Desr. .. ..	R.
Bhandar, K. .. ..	<i>Pogostemon plectranthoides</i> Desf. .. ..	L. A.
Bhandar, K. .. ..	<i>Strobilanthes callosus</i> , Nees. .. ..	L. V. A.
Bankabas, H. M. K. .. ..	<i>Thespesia lampas</i> , Dalz. and Gibs. .. ..	L. A.
Bor, M. K. .. ..	<i>Zizyphus rotundifolia</i> , Lamk. Syn. <i>Zizyphus nummularia</i> , W. and A.	L. F.
<b>C—Climbers</b>		
Chilati, M. .. ..	<i>Caesalpinia sepiaria</i> , Roxb. .. ..	L. F.
Chamel, H. .. ..	<i>Jasminum arborescens</i> , Roxb. .. ..	L. F.
Chilati, M. K. .. ..	<i>Mimosa rubicaulis</i> , Lamk. .. ..	L. F.
Churni, K. .. ..	<i>Zizyphus rugosa</i> , Lamk. .. ..	F. and L. A.
Dhawai, H. .. ..		
Dhawati, M. .. ..	<i>Woodfordia floribunda</i> , Salisb, .. ..	L. A.
Dhi, K. .. ..	Syn. <i>Woodfordia fruticosa</i> , Kurz.	
Dhin, K. .. ..		
Guno-hi, H. M. K. .. ..	<i>Abrus precatorius</i> , Linn. .. ..	
Gursakri, H. .. ..		
Gordhaman, M. .. ..	<i>Grewia floescens</i> , Juss .. ..	O.
Gwagar, K. .. ..	<i>Hamiltonia suaveolens</i> .. ..	L. F.
Jhau, H. M. K. .. ..	<i>Tamarix gallica</i> , Linn. .. ..	L. A.
Katakholra, K. .. ..	<i>Daedalacanthus roseus</i> , T. Anders. .. ..	L. A.
Korajothi, K. .. ..	<i>Helicteres isora</i> , Linn. .. ..	A.
Karsali, K. .. ..	<i>Nyctanthes arborescens</i> , Linn. .. ..	L. A.
Kawarka, M. .. ..	<i>Loranthus longiflorus</i> , Desr. .. ..	R.
Lalgunchi, H.M.K. .. ..	<i>Abrus precatorius</i> , Linn. .. ..	O.
Lantana, H. .. ..	<i>Lantana aculeata</i> , Linn. .. ..	V. A.
Mekar, K. .. ..	<i>Gymnosponia montana</i> , Benth. .. ..	L. O.

Local Name (1)	Botanical Name (2)	Remarks (3)
<b>C—Climbers—contd.</b>		
Marorphal, H. ..	<i>Helicteres isora</i> , Linn. .. ..	A.
Muradsheng, M.		
Nirguri, M. ..	<i>Vitex negundo</i> , Linn. .. ..	L. A.
Pithondi, M. K.	<i>Fluggea microcarpa</i> , Bl. .. ..	L. A.
Raimunia, K.	<i>Lantana aculeata</i> , Linn. .. .. Syn. <i>Lantana camara</i> , Linn. .. ..	V. A.
Ringni, K. ..	<i>Solanum indicum</i> , Linn. .. ..	F.
Samalu, K. ..	<i>Vitex negundo</i> , Linn. .. ..	L. A.
Sakria, K. ..	<i>Zizyphus rugosa</i> Lamk. .. ..	F. & L. A.
Tarwar, K. M.	<i>Cassia auriculata</i> , Linn. .. ..	L. F.
<b>D—Herbs</b>		
Babra, M. K.	<i>Dioscorea pentaphylla</i> , Linn. .. ..	A climbing herb. O.
Bachandi, H.	<i>Dioscorea daemona</i> , Roxb. .. ..	A climbing herb. F.
Baval, K. ..	<i>Dioscorea bulbifera</i> , Linn. .. ..	A climbing herb. F.
Jangli Kela, H.	<i>Musa superba</i> , Roxb. .. ..	L. F. occurs on rocky hillside and banks of streams especially at high elevations.
Kulu, K. ..	<i>Dioscorea daemona</i> , Roxb. .. ..	A. climbing her F.
Tora, K. ..	<i>Musa superba</i> , Roxb. .. ..	L. F.
Tarota, M. K.	<i>Cassia tora</i> , Linn. .. ..	L. A. occurs in heavily grazed forests in the south.
Wild banana, E.	<i>Musa superba</i> , Roxb. .. ..	L. F.
<b>E—Grasses, Sedges and Bamboos</b>		
Baba Jara, K.	<i>Heteropogon ritchiei</i> (Hook. f.), Blatter and Mc. Laun. .. ..	A.
Bamboo, E. ..	<i>Bambusa arundinacea</i> , Willd. .. ..	L. A.
Bamboo, E. ..	<i>Dendrocalamus strictus</i> , Nees. .. ..	L. A. occurs on frost areas and on old village sites.
Bana, H. M. K.		
Baru, K. ..		
Boru, K.	<i>Sorghum halepense</i> , Pers. .. ..	L. F. occurs in river beds in the North-West.
Dongra, K. ..	<i>Cyperus tegetum</i> , Roxb. .. ..	F. L. A. occurs hill tops and old village areas.
Gondall, K. ..	<i>Anthistiria ciliata</i> , Linn. .. ..	L. A. occurs in frost areas and in valleys.
Gondhalt, K.		
Karsali, K. ..	<i>Chionocachne barbata</i> , R. Br. .. ..	L. A. occurs in the Sipna valley between Semadoh and Pili where it has been introduced.
Katang bans, H. M. K.	<i>Bambusa arundinacea</i> , Willd. .. ..	
Kusal, M. ..	<i>Heteropogon contortus</i> , (L) Beauv. ex. Roem. and Sch. .. .. Syn. <i>Andropogon contortus</i> , Linn. .. ..	A.
Podar, H. ..	<i>Sorghum halepense</i> , Pers. .. ..	L. A.
Phor, K. ..	<i>Heteropogon ritchiei</i> (Hook, f.) Blatter and Mc. Laun. .. ..	A.
Pochati, K. ..		
Phuli, K.		

Local Name (1)	Botanical Name (2)	Remarks (3)
<b>E—Grasses, Sedges and Bamboos—contd.</b>		
Poc-hati, K. .. ..	<i>Apluda varia</i> , Hack .. .. .	A.
Phuli, K. .. ..		
Rusa, H. M. K. .. ..	<i>Cymbopogon martini</i> , Stapf. Syn. <i>Andropogon Schoenanthus</i> , Linn. .. ..	F. Two varieties called 'Motia' and 'Sofia occur'.
Sainar, K. .. ..	<i>Ischaemum sulcatum</i> Hack. .. .. .	A.
Sukal, M. } .. ..	<i>Steropogon contortus</i> (L) .. .. .	A.
Sukla, M. } .. ..	Beauy. ex. Roem and Sch. Syn. <i>Andropogon contortus</i> , Linn. .. ..	
Tikhar, H. M. K. .. ..	<i>Cymbopogon martini</i> , Stapf. .. .. . Syn. <i>Andropogon Schoenanthus</i> , Linn. .. ..	F. Two varieties called 'Sofia' and 'Motia occur.
<b>F—Plants grown as field crops</b>		
Arhar, H. ... ..	<i>Cajanus indicus</i> , Spreng.	
Betel vine, E. .. ..	<i>Piper betle</i> , Linn.	
Channa H. M. .. ..	<i>Cicer arietinum</i> , Linn.	
Cotton, E. .. ..	<i>Gossypium herbaceum</i> , Linn.	
Gram, E. .. ..	<i>Cicer arietinum</i> , Linn.	
Jagn, K. .. ..	<i>Guizotia abyssinica</i> , cass.	
Juari, H. M. K. .. ..	<i>Sorghum vulgare</i> , Pers.	
Kapas, H. M. . . .	<i>Gossypium herbaceum</i> , Linn.	
Kodon, H. M. K. .. ..	<i>Paspalum scrobiculatum</i> , Linn.	
Kutki, H. M. K. .. ..	<i>Panicum miliare</i> , Lamk.	
Masur, H. M. .. ..	<i>Eroum Lens</i> , Linn.	
Pan, H. M. .. ..	<i>Piper betle</i> , Linn.	
Sawan, K. .. ..	<i>Panicum crus-galli-frumentaceum</i> , Roxb.	
Tur, M. .. ..	<i>Cajanus indicus</i> , Spr.	