

APPENDICES

Appendix I: List of samples collected for DNA barcoding and their locations

SI No.	Species	Locations
1.	<i>Calamus brandisii</i> Becc.	Agasthyamala, Kerala
		Athirumpuzha, Kerala
		Attayar, Kerala
2.	<i>Calamus delessertianus</i> Becc.	Vazhachal, Thrissur, Kerala
		Kakkayam, Kozhikode, Kerala
		Charmadi, Karnataka
3.	<i>Calamus dransfieldii</i> Renuka	Dhoni Hills, Palakkad, Kerala
		NCBI
4.	<i>Calamus gamblei</i> Becc.	Vazhachal, Thrissur, Kerala
		Palode, Kerala
		Achenkovil, Kerala
		Arippa, Kerala
5.	<i>Calamus hookerianus</i> Becc.	Peppara, Neyyar, Kerala
		Nelliampathy, Kerala
		Randanamukku, Kerala
6.	<i>Calamus karnatakensis</i> Renuka & Lakshmana	Mudigiri, Karnataka
		Thalakaveri, Karnataka
		Agumbe, Karnataka
7.	<i>Calamus lacciferus</i> Lakshmana & Renuka	Aralam, Kerala
		Thalakavery, Karnataka
		Agumbe, Karnataka
8.	<i>Calamus lakshmanae</i> Renuka	Umayar, Kerala
		Rosemala, Kerala
		Agumbe, Karnataka
		Charmadi, Karnataka
9.	<i>Calamus metzianus</i> Schltdl.	Ponnamkudam, Ernakulam, Kerala
		Pattakarimba, Nelliampathy, Kerala
		Honavar, Karnataka

10.	<i>Calamus nagbettaii</i> R.R. Fernandez & Dey	Umayar, Kerala
		Charmadi, Karnataka
		Karikke, Karnataka
11.	<i>Calamus neelagiricus</i> Renuka	Silent valley, Kerala
		Silent valley, Kerala
		Silent valley, Kerala
		Silent valley, Kerala
12.	<i>Calamus prasinus</i> Lakshmana & Renuka	Makkut, Karnataka
		Madikkeri, Karnataka
		Sampaje, Karnataka
13.	<i>Calamus pseudotenuis</i> Becc.	Nelliampathy, Kerala
		Nelliampathy, Kerala
		Kallar, Trivandrum, Kerala
		Bonacaud, Trivandrum, Kerala
14.	<i>Calamus rotang</i> L.	Mukkombu, Trichi, Tamil nadu
		Warangal 1, Telangana
		Warangal 2, Telangana
15.	<i>Calamus shendurunii</i> Anto, Renuka & Sreek.	Vilakkumaram, Rosemala, Kerala
		Rosemala, Kollam, Kerala
		Shenduruny valley, Kerala
16.	<i>Calamus stoloniferus</i> Renuka	Makkut, Karnataka
		Near Makkut, Karnataka
		Makkut 2, Karnataka
		On the way to Virajpet
17.	<i>Calamus thwaitesii</i> Becc.	Vazhachal, Thrissur, Kerala
		Amboli Ghats, Maharashtra
		Sampaje, Karnataka
18.	<i>Calamus travancoricus</i> Bedd.	Arienkavu, Kerala
		Nelliampathy, Kerala
		Kakkayam, Kozhikode, Kerala

		Makkut, Karnataka
19.	<i>Calamus vattayila</i> Renuka	Sholayar, Tamil Nadu
		Aralam, Kerala
		Achenkovil, Kerala
		Dharamsthala, Karnataka
20.	<i>Calamus viminalis</i> Willd.	Jalatharangini, Andhra Pradesh
		Mattam Bhemavaram, Andhra Pradesh
		Palmetum, KFRI
21.	<i>Calamus wightii</i> Griff.	Thudakki, Silent valley
		Sispara, Silent valley, Kerala
		Near Thudakki, Silent valley

Appendix II: Barcode regions and GenBank Accessions

Sl No.	Barcode region	Genbank Accession
1.	<i>rbcL</i>	MG907310-MG907369
2.	<i>matK</i>	MG907370-MG907438
3.	<i>psbA-trnH</i>	MG907439-MG907489 MG911722-MG911727
4.	<i>rpoB</i>	MH367934-MH368001
5.	<i>rpoC</i>	MH367875-MH367933
6.	<i>psbK-psbI</i>	MH430984-MH431023
7.	<i>atpF-atpH</i>	MH465538-MH465597
8.	RPB2	MH400828-MH400894

Appendix III: Barcode regions of *C. metzianus* and *C. rotang* and their GenBank accessions

Species Name	Location	Genbank Accessions	
		RPB2	<i>psbA-trnH</i>
<i>Calamus metzianus</i>	Asramam, Kollam, Kerala, India	MK106606	MK106614
	Edayilekkad, Kannur, Kerala, India	MK106607	MK106615
	Thekkumbad Kannur, Kerala, India	MK106608	MK106616
	Honavar, Karnataka, India	MK106609	MK106617
	Kollam, Kerala,India	MK106610	MK106618
	Ponnakudam,Ernakulam, Kerala,India	MK106611	MK106619
	Cherthala, Alappuzha, Kerala,India	MK106612	MK106620
	Pattakarimba, Nilambur, Kerala,India	MK106613	MK1066121
<i>Calamus rotang</i>	Near Mukkombu Dam, Trichy, Tamil Nadu	MH400889	MG907444
	Warangal, Thelungana	MH400888	MG907443

Appendix IV: Samples collected for phylogenetic analyses and their collected locations

SI No.	Species	Locations
1.	<i>Calamus andamanicus</i>	Palmetum, KFRI, Thrissur
2.	<i>Calamus baratangensis</i>	Palmetum, KFRI, Thrissur
3.	<i>Calamus brandissi</i>	Agasthyamala, Kerala
4.	<i>Calamus delessertianus</i>	Charmadi, Karnataka
5.	<i>Calamus dransfieldii</i>	Dhoni Hills, Palaghat
6.	<i>Calamus flagellum</i>	RFRI, Jorhat, Assam
7.	<i>Calamus floribundus</i>	RFRI, Jorhat, Assam
8.	<i>Calamus gamblei</i>	Vazhachal, Thrissur
9.	<i>Calamus gracilis</i>	RFRI, Jorhat, Assam
10.	<i>Calamus guruba</i>	RFRI, Jorhat, Assam
11.	<i>Calamus hookerianus</i>	Peppara, Neyyar
12.	<i>Calamus karnatakensis</i>	Thalakaveri, Karnataka
13.	<i>Calamus lacciferus</i>	Thalakavery, Karnataka
14.	<i>Calamus lakshmanae</i>	Charmadi, Karnataka
15.	<i>Calamus latifolius</i>	RFRI, Jorhat, Assam
16.	<i>Calamus longisetus</i>	Palmetum, KFRI, Thrissur
17.	<i>Calamus metzianus</i>	Pattakarimba, Nelliampathy, Kerala
18.	<i>Calamus nagbettai</i>	Karikke, Karnataka
19.	<i>Calamus nambariensis</i>	RFRI, Jorhat, Assam
20.	<i>Calamus neelagiricus</i>	Silent valley
21.	<i>Calamus palustris</i>	Palmetum, KFRI, Thrissur
22.	<i>Calamus peregrinus</i>	Palmetum, KFRI, Thrissur
23.	<i>Calamus prasinus</i>	Sampaje, Karnataka

24.	<i>Calamus pseudotenuis</i>	Nelliampathy, Kerala
25.	<i>Calamus rotang</i>	Mukkombu, Trichi, Tamil nadu
26.	<i>Calamus shendurunii</i>	Vilakkumaram, Rosemala, Kerala
27.	<i>Calamus stoloniferus</i>	Makkut, Karnataka
28.	<i>Calamus tenuis</i>	RFRI, Jorhat, Assam
29.	<i>Calamus tetradactylus</i>	Palmetum, KFRI, Thrissur
30.	<i>Calamus thwaitesii</i>	Vazhachal, Thrissur, Kerala
31.	<i>Calamus travancoricus</i>	Arienkavu, Kerala
32.	<i>Calamus vattayila</i>	Sholayar
33.	<i>Calamus vimnalis</i>	Jalatharangini, Andhra Pradesh
34.	<i>Calamus wightii</i>	Thudakki, Silent valley
35.	<i>Daemonorops manii</i>	Palmetum, KFRI, Thrissur
36.	<i>Daemonorops rarispinosa</i>	Palmetum, KFRI, Thrissur
37.	<i>Korthalsia cheb</i>	Palmetum, KFRI, Thrissur
38.	<i>Plectocomia himalayana</i>	Palmetum, KFRI, Thrissur
39.	<i>Salacca ramosiana</i>	Palmetum, KFRI, Thrissur

Appendix V: Sequences retrieved from NCBI for study

Genus	Species	GenBank ID	
		<i>atpH-atpI</i>	RPB2
LEPIDOCARYAE TRIBE			
<i>Eremospatha</i>	<i>Eremospatha barendii</i>	KJ500150.1	KX346464.1
	<i>Eremospatha cuspidata</i>	KJ500156.1	KX346470.1
	<i>Eremospatha dransfieldii</i>	KJ500149.1	KX346463.1
	<i>Eremospatha haullevilleana</i>	KJ500155.1	KX346469.1
	<i>Eremospatha hookeri</i>	KJ500157.1	KX346472.1
	<i>Eremospatha laurentii</i>	KJ500154.1	KX346468.1
	<i>Eremospatha macrocarpa</i>	KJ500152.1	KX346466.1
	<i>Eremospatha wendlandiana</i>	KJ500151.1	FR729729.1
<i>Laccosperma</i>	<i>Laccosperma acutiflorum</i>	KJ500148.1	KX346461.1
	<i>Laccosperma korupense</i>	KJ500142.1	KX346454.1
	<i>Laccosperma opacum</i>	KJ500146.1	KX346459.1
	<i>Laccosperma robustum</i>	KJ500144.1	KX346456.1
	<i>Laccosperma secundiflorum</i>	KJ500141.1	KX346453.1
<i>Oncocalamus</i>	<i>Oncocalamus</i>	KJ500136.1	KX346449.1

	<i>macrospathus</i>		
	<i>Oncocalamus mannii</i>	KJ500137.1	KX346450.1
	<i>Oncocalamus tuleyi</i>	KJ500139.1	KX346451.1
<i>Raphia</i>	<i>Raphia hookeri</i>	KJ500135.1	KX346448.1
	<i>Raphia palma-pinus</i>	KJ500134.1	KX346447.1
<i>Lepidocaryum</i>	<i>Lepidocaryum tenue</i>	KJ500133.1	KX346446.1
<i>Mauritia</i>	<i>Mauritia flexuosa</i>	KJ500131.1	KJ500038.1
<i>Mauritiella</i>	<i>Mauritiella armata</i>	KJ500132.1	KX346445.1
EUGEISSONEAE TRIBE			
	<i>Eugeissona tristis</i>	KJ500128.1	KX346441.1
CALAMEAE TRIBE			
	<i>Metroxylon salomonense</i>	KJ500129.1	KX346442.1
	<i>Calamus aruensis</i>	KJ500130.1	KX346443.1

Appendix VI: Phylogenetic markers and their GenBank accessions

Sl. No.	DNA markers	GenBank Accession
1.	<i>rps 16</i>	MK105285- MK105323
2.	<i>atpH-atpI</i>	MK105324- MK105362
3.	<i>psbA-trnH</i>	MG907439-MG907489 MG911722-MG911727
4.	ITS2	MK105363- MK105401
5.	<i>trnL-trnF</i>	MK105402- MK105440
6.	RPB2	MK106566-MK106604