BULL. BOT. SURV. INDIA

Vol. 4, Nos. 1-4 : pp. 233-237, 1962

MONSOON FLORA OF BOMBAY AND SALSETTE ISLANDS

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ABSTRACT

The information regarding the vegetation and in particular the monsoon flora of the present area seems to be scant. The author gives a complete account of the monsoon vegetation of Bombay and Salsette Islands, in this paper. During the rainy season, about 218 dicotyledons and about 50 monocotyledons were collected either in flowers, fruits or both. Among the monocotyledons, the cyperaceae and gramineae have not been included ; they will be accounted for separately.

INTRODUCTION

It seems the present area has remained unexplored by several distinguished botanists, who have explored various parts of Bombay Presidency. Graham (1839), Dalzell (1850-52), Dalzell & Gibson (1861), Nairne (1894), Woodrow (1897-1901), Cooke (1903-1908) and Talbot (1909-1911) etc. do not mention the present area in their works, unless it may be understood under the general term "Konkan" or the more particular area "Salsette Islands". In his familywise "Revision of the flora of Bombay Presidency" Blatter (1926-1935) often gives specific localities from this area. *Dipcadi saxorum* Blatter (1928) is a new record from Borivali. Santapau & Randaria (*Journ. Bomb. nat. Hist. Soc.* 53: 185-200, 1956) described the monsoon vegetation of Krishnagiri National Park. Borivali. Santapau, Randaria & Fernandez (*Journ. Bomb. nat. Hist. Soc.* 52: 661-663, 1954) described *Commelina suffruticosa* Bl. and *Ipomoea triloba* Linn. as new records for Bombay State, from the present area. The author has been studying the vegetation of area under consideration for the last eight years and a complete account of the monsoon vegetation of Bombay and Salsette Islands is given in this paper.

GEOGRAPHY OF THE AREA

Along the western coast of India, between latitudes 18°53'N and 19°20'N and longitudes 72°45'E and 73°00'E are scattered a few islands among which Bombay, Trombay, Salsette, Elephanta have acquired sufficient prominence due to their geographical positions and historical settings.

In the north, the island of Salsette is separated from the mainland by the water of the Bassein Creek. Smaller creeks indent the western coastal margin. The island of Bombay is separated from the Salsette by Bandra Creek while the harbour waters in the east are the only link with mainland in the east.

Salsette is the largest and the most hilly amongst all the islands. The hills are thickly forested. It is in this hilly area that the National Park is located. Tulsi, Vihar and Powai are three lakes in this island.

Geologically the rocks belong to the Deccan Trap series. The main rock type is basalt which is the chief constituent of the big and small hill masses. The highest hill mass in Salsette Islands is about 450 meters near about Kanheri caves.

RAINFALL

The rainy season lasts roughly from about the middle of June to the end of September. The advent of SW monsoon is heralded by some severe local thunder-storms from the end of May onwards. The monsoon proper sets in about the middle of June and continues usually with great force up to the end of August. Thereafter, there may be a very short break of clear sunny days. The NW monsoon starts about the end of the first week of September and continues more or less regularly till the end of the month. Occasionally a few heavy showers come down at the beginning of October. From about the middle of October onwards till the next monsoon, the rainfall may be reduced to just an occasional light shower, particularly towards the end of December. These occasional showers are generally of short duration and make little difference to the climate. Of the total amount of rainfall recorded for the district, the greatest percentage belong to the period June to October. The rainfall for the rest of the year may go up to about 5% of the total yearly figure. The average rainfall for the years 1946-55 is 220.4 cm.

GENERAL PATTERN OF MONSOON VEGETATION

After the first few showers of rain towards the end of May or beginning of June, the entire area, which appeared almost barren throughout the dry season, suddenly becomes covered with dense vegetation which gives the ground a rich deep green colour. Grasses occupy the greater part of the ground. Among these grasses, a number of bulbous plants belonging to the families Amaryllidaceae, Araceae, Hypoxidaceae, Liliaceae, Scitaminaceae etc. make their appearance, some of them flower even before the leaves appear. It is interesting to note that most of the monocotyledons are short lived and disappear in a week or two ; hence regular and more frequent outings were made during the rainy season to collect this ephemeral flora.

Commonest of such plants are *Amorphophallus commutatus* Engl., *Chlorophytum tuberosum* Baker, *Curculigo orchioides* Gaertn., *Crinum latifolium* Linn., *Scilla hyacinthina* Macbr. etc.

Soon after that, in about a week or two, among these grasses *Anotis foetida* Bth. & Hk. f., *Justicia procumbens* Linn. and *Mollugo pentaphylla* Linn. are very common, often forming very large patches and for a time become dominant in the area ; other common plants are *Anthoceros* sp., *Biophytum sensitivum* DC., *Borreria stricta* Schum., *Cyperus leucocephalus* Retz., *Fimbristylis junciformis* Kunth., *Heliotropium marifolium* var. *laxiflora* Cooke, *Iphigenia indica* Gray, *Kyllinga monocephala* Rottb., *Murdannia nudiflora* Brenan, *Ophioglossum* sp., *Phyllanthus maderaspatensis* Linn., *Polygala chinensis* Linn., *Trichodesma amplexicaule* Roth, and a number of seedlings of *Celosia argentea* Linn. and *Impatiens balsamina* var. *balsamina*. *Rhynchospora wightiana* Steud. and *Setaria glauca* Beauv. are conspicuous by the colour of their spikes.

By about the middle of monsoon, grasses have become fairly tall and dominant in the area. The very common and abundant, either in pure or mixed stands, are *Apluda mutica* Linn., *Heteropogon contortus* Beauv., *Ischaemum imbricatum* Stapf ex Ridley, *Iseilema laxum* Hack., *Pseudanthistirria heteroclita* Hk. f., *Themeda quadrivalvis* O.K. etc. On the roots of such grasses the parasites *Centranthera nepalensis* Don., *Ramphicarpa longiflora* Bth., *Sopubia delphinifolia* Don. and *Striga asiatica* O.K. are frequent. Among these grasses, a number of Compositae, Leguminosae, Orchidaceae and Rubiaceous plants are found. The orchids, though showy, are but rare or few and do not characterise in any way the vegetation as such.

During the second half of the monsoon, *Celosia argentea* Linn., *Impatiens balsamina* var. *balsamina*, *Gloriosa superba* Linn. are very common and abundant and are most noticeable plants in the area by their flowers. *Triumfetta rhomboidea* Jacq. is also conspicuous by its abundance and masses of yellow flowers. Along road sides and railway lines *Acanthospermum hispidium* DC., *Hyptis suaveolens* Poit., *Malachra capitata* Linn., *Xanthium strumarium* Linn. occur in dense pure or mixed stands, practically becoming dominant in the areas they occur, and often hiding the undergrowth vegetation. *Acalypha indica* Linn., *Cleome viscosa* Linn., *Corchorus capsularis* Linn., *C. olitorius* Linn., *Fleurya interrupta* Gaud., *Melochia corchorifolia* Linn., *Physalis longifolia* Nutt., *P. minima* Linn., *Synedrella nodiflora* Gaertn. etc. are also fairly common, some of them often in patches.

On the grasses on hills and on the hedges along road sides and railway lines, a number of twiners and climbers belonging to the families Ampelidaceae, Asclepiadaceae, Celastraceae, Convolvulaceae, Cucurbitaceae, Dioscoreaceae, Malpighiaceae, Menispermaceae, Papilionaceae, etc. are found. Some of these plants e.g. *Canavalia gladiata* DC., *Argyreia sericea* Dalz., *Luffa acutangula* Roxb., *Mucuna prurita* Hk. f., *Rivea hypocrateriformis* Choisy, *Vigna capensis* Walp. etc. are very conspicuous by the size, colour and the masses of their flowers.

Throughout the rains, in the undergrowth of the forest, there are hardly any changes except for a variety of fungi and occasional plants of *Amorphophallus commutatus* Eng., *Curcuma inodora* Blatt., *Costus speciosus* Sm., *Fleurya interrupta* Gaud., *Impatiens kleinii* W. & A., *Leea macrophylla* Roxb., *Tacca leontopetaloides* O.K. etc.

On the edges of the forest, however, many plants typical of the rains grow, and by about the middle of the monsoon the following are among the commonest: *Barleria prattensis* Sant., *Blainvillea acmella* Philip., *Eranthemum roseum* R. Br., *Haplanthus neilgherryensis* Wt., *Hemigraphis latebrosa* var. *heyneana* Bremek., *Lindernia* sp., *Neuracanthus sphaerostachyus* Dalz., *Rungia pectinata* Nees, *Sida spinosa* Linn., *Tricholepis glaberrima* DC., *Vicoa indica* DC., etc.

VEGETATION OF PONDS AND WATER DITCHES

Temporary ponds and water ditches are filled up during the monsoon. *Limnanthemum cristatum* Griseb., *L. indicum* Griseb., *Nymphaea pubescens* Willd., *N. stellata* Willd., *Oryza ruffipogon* Griff. and *Pseudoraphis spinescens* Vick. are common, floating. Along the margins of the ponds of the following are common. *Asteracantha longifolia* Nees, various species of Cyperaceae, *Limnophila indica* Druce, *Malachra capitata* Linn.

VEGETATION ON ROCKS

During monsoon, most of the flat rocks are covered with vegetation, even the vertical ones become more or less covered with grasses, bryophytes, lichens etc. On these rocks a number of plants are found. A few of them are *Anotis foetida* Bth. & Hk. f., *Begonia crenata* Dryand., *Cyanotis fasciculata* Schult. f., *Cyperus aristatus* Rottb., *Dipcadi saxorum* Blatt., *Eriocaulon* sp., *Melanocenchris jacquemontii* J. & S., *Murdannia semiteres* Sant., *Utricularia striatula* Sm. etc. On flat rocks, *Rotala densiflora* Koehne is often found in water-logged soil, almost in pure stands.

VEGETATION OF CULTIVATED FIELDS

Orzyza sativa Linn. is extensively cultivated in the whole area during monsoon. *Abelmoschus esculentus* Moench., *Luffa acutangula* Roxb., *L. cylindrica* Roem., *Trichosanthes anguina* Linn. etc. are commonly cultivated as vegetables. In these cultivated fields *Ammannia multiflora* Roxb., *Bergia capensis* Linn., Cyperaceae various species, *Dopatrium junceum* B.-H., *Eragrostis unioloides* Nees, *Isachne globosa* O.K. etc. are common. *Peplidium maritimum* Wetstt. is found in water-logged rice fields only at Madh Island.

List of Monsoon Plants

NYMPHAEACEAE

(1) *Nymphaea pubescens* Willd.
(2) *N. stellata* Willd.

CAPPARIDACEAE

(3) *Cleome chelidonii* L.f.
(4) *C. viscosa* Linn.

VIOLACEAE

(5) *Hybanthus enneaspermus* (L.) F. Muell.

POLYGALACEAE

(6) *Polygala chinensis* Linn.

MALVACEAE

(7) *Abelmoschus esculentus* (L.) Moench.
(8) *A. manihot* (L.) Medik.
(9) *Hibiscus cannabinus* Linn.
(10) *H. furcatus* Willd.
(11) *H. lampas* Cav.
(12) *H. lobatus* (Murr.) O. K.
(13) *H. vitifolius* Linn.
(14) *Malachra capitata* Linn.
(15) *Sida acuta* Burm.
(16) *S. cordifolia* Linn.
(17) *S. rhombifolia* var. *retusa* Masters.
(18) *S. veronicifolia* Lamk.
(19) *Urena lobata* Linn.

STERCULIACEAE

(20) *Melochia corchorifolia* Linn.
(21) *Waltheria indica* Linn.

TILIACEAE

(22) *Corchorus capsularis* Linn.
(23) *C. aestuans* Linn.
(24) *C. fascicularis* Lamk.
(25) *C. olitorius* Linn.
(26) *Triumfetta pentandra* A. Rich.
(27) *T. rhomboidea* Jacq.

BALSAMINACEAE

(28) *Impatiens balsamina* var. *balsamina.*
(29) *I. kleinii* W. & A.

RHAMNACEAE

(30) *Zizyphus glaberrima* Santapau
(31) *Z. mauritiana* Lamk.
(32) *Z. oenoplia* Mill.

AMPELIDACEAE

(33) *Ampelocissus latifolia* (Roxb.) Planch.
(34) *Cayratia carnosa* Gagnep.
(35) *Leea edgeworthii* Santapau
(36) *L. macrophylla* Roxb. ex Hornem.

SAPINDACEAE

(37) *Cardiospermum halicacabum* Linn.

PAPILIONACEAE

(38) *Abrus precatorius* Linn.
(39) *Aeschynomene indica* Linn.
(40) *Alysicarpus bupleurifolius* (L.) DC.
(41) *A. procumbens* (Roxb.) Schindl.
(42) *A. vaginalis* (L.) DC.
(43) *A. violaceus* (Forsk.) Schindl.
(44) *Canavalia gladiata* (Jacq.) DC.
(45) *Clitoria biflora* Dalz.
(46) *Crotalaria filipis* Bth.
(47) *C. medicaginea* Lamk.
(48) *C. prostrata* Roxb. ex DC.
(49) *Derris scandens* (Roxb.) Bth.
(50) *Desmodium diffusum* (Willd.) DC.
(51) *D. gangeticum* (L.) DC.
(52) *D. laxiflorum* DC.
(53) *D. triangulare* var. *congestum* Santapau
(54) *D. triflorum* (L.) DC.
(55) *D. triquetrum* (L.) DC.
(56) *Dunbaria glandulosa* (Dalz. & Gibs.) Prain
(57) *Geissaspis cristata* W. & A.
(58) *Indigofera cordifolia* Heyne ex Roth
(59) *I. glandulosa* Roxb. ex Willd.
(60) *I. hirsuta* Linn.
(61) *I. linnaei* Ali.
(62) *I. trifoliata* Linn.
(63) *I. tinctorea* Linn.
(64) *Moghania tuberosa* (Dalz.) O. K.
(65) *Mucuna prurita* Hk. f.
(66) *Phaseolus radiatus* Linn.
(67) *P. trilobus* Ait.
(68) *Sesbania bispinosa* (Jacq.) F. & R.
(69) *Smithia conferta* Sm.
(70) *S. salsuginea* Hance.
(71) *S. sensitiva* Ait.
(72) *Tephrosia pauciflora* Grah. ex Baker
(73) *T. purpurea* Pers.
(74) *T. strigosa* (Dalz.) Sant. & Mahesh.
(75) *Teramnus labialis* (L. f.) Spr.
(76) *Uraria rufescens* (DC.) Schindl.
(77) *Vigna capensis* Walp.
(78) *Zornia diphylla* (L.) Pers.

CAESALPINIACEAE

(79) *Caesalpinia crista* Linn.
(80) *Cassia absus* Linn.
(81) *C. occidentalis* Linn.
(82) *C. tora* Linn.
(83) *C. pumila* Lamk.

MIMOSACEAE

(84) *Acacia pennata* Willd.
(85) *Leucaena glauca* (L.) Bth.

DROSERACEAE

(86) *Drosera indica* Linn.

LYTHRACEAE

(87) *Ammannia multiflora* Roxb.
(88) *Rotala densiflora* (Roth) Koehne

ONAGRACEAE

(89) *Jussiaea suffruticosa* Linn.
(90) *Ludwigia parviflora* Roxb.

TRAPACEAE

(91) *Trapa bispinosa* Roxb.

CUCURBITACEAE

(91) *Bryonopsis laciniosa* Naud.
(92) *Cucumis callosus* (Rottl.) Cogn.
(93) *Cucurbita maxima* Duch.
(94) *Luffa acutangula* (L.) Roxb.
(95) *L. acutangula* var. *amara* Clarke
(96) *L. cylindrica* (L.) Roems
(97) *Melothria heterophylla* (Lour.) Cogn.
(98) *M. maderaspatana* (L.) Cogn.
(99) *Momordica dioica* Roxb. ex Willd.
(100) *Trichosanthes cucumerina* Linn.

BEGONIACEAE

(101) *Begonia crenata* Dryand.

FICOIDACEAE

(102) *Trianthema portulacastrum* Linn.

MOLLUGINACEAE

(103) *Mollugo pentaphylla* Linn.

RUBIACEAE

(104) *Anotis foetida* Bth. & Hk. f.
(105) *Borreria hispida* (L.) Schum.
(106) *B. stricta* (L. f.) Schum.
(107) *Oldenlandia* sp.

COMPOSITAE

(108) *Acanthospermum hispidum* DC.
(109) *Bidens biternata* (Lour.) M. & S.
(110) *Blainvillea acmella* (L.) Philip.
(111) *Centratherum phyllolaenum* (DC.) Bth. ex Clarke
(112) *Elephantopus scaber* Linn.
(113) *Emilia sonchifolia* (L.) DC.
(114) *Synedrella nodiflora* (L. ex Willd.) Gaertn.
(115) *Tricholepis glaberrima* DC.
(116) *Vicoa indica* (Willd.) DC.
(117) *Xanthium strumarium* Linn.

MYRSINACEAE

(118) *Embelia tsjeriam-cottam* (R. & S.) DC.

ASCLEPIADACEAE

(119) *Ceropegia attenuata* Hk. f.
(120) *C. bulbosa* Roxb.
(121) *Dregea volubilis* (L. f.) Bth.
(122) *Holostemma annularium* (Roxb.) Schum.
(123) *Leptadenia reticulata* (Retz.) W. & A.
(124) *Oxystelma secamone* (L.) Karst.

PERIPLOCACEAE

(125) *Cryptolepis buchanani* R. & S.
(126) *Hemidesmus indicus* (L.) R. Br.

LOGANIACEAE

(127) *Cynoctonum mitreola* (L.) Britt.

GENTIANACEAE

(128) *Enicostemma verticellata* (Willd.) Baill.
(129) *Exacum bicolor* Roxb.
(130) *E. pedunculatum* Linn.
(131) *E. pumilum* Griseb.
(132) *Hoppea dichotoma* Willd.
(133) *Limnanthemum cristatum* (Roxb.) Griseb.
(134) *L. indicum* (L.) Griseb.

BORAGINACEAE

(135) *Heliotropium marifolium* Retz.
(136) *H. marifolium* var. *laxiflora* Cooke
(137) *Trichodesma amplexicaule* Roth

CONVOLVULACEAE

(138) *Argyreia nervosa* (Burm. f.) Boj.
(139) *A. sericea* Dalz.
(140) *Evolvulus alsinoides* Linn.
(141) *E. nummularius* Linn.
(142) *Imomoea digitata* Linn.
(143) *I. muricata* (L.) Jacq.
(144) *I. nil* (L.) Roth
(145) *I. obscura* (L.) Ker-gawl.
(146) *I. pestigridis* Linn.
(147) *I. quamoclit* Linn.
(148) *I. sepiaria* Koen. ex Roxb.
(149) *I. triloba* Linn.
(150) *Merremia tridentata* (L.) Hall. f.
(151) *Operculina turpethum* Mans.
(152) *Rivea hypocrateriformis* Choisy

SOLANACEAE

(153) *Datura metel* Linn.
(154) *Physalis longifolia* Nutt.
(155) *P. minima* Linn.
(156) *Solanum indicum* Linn.
(157) *S. nigrum* Linn.

SCROPHULARIACEAE

(158) *Buchnera hispida* Buch.-Ham.
(159) *Centranthera nepalensis* D. Don
(160) *Dopatrium junceum* (Roxb.) Buch.-Ham.
(161) *Limnophila indica* (L.) Druce.
(162) *L. sessiliflora* (Vahl) Blume
(163) *Lindernia ciliata* (Colsm.) Pennell
(164) *L. crustacea* (L.) Muell.
(165) *L. oppositifolia* (Retz.) Mukerjee
(166) *Peplidium maritimum* (L. f.) Wetstt.
(167) *Ramphicarpa longiflora* (Arn.) Bth.
(168) *Sopubia delphinifolia* (Roxb.) Don.
(169) *Striga asiatica* (L.) O. K.
(170) *S. euphrasioides* (Vahl) Bth.

LENTIBULARIACEAE

(171) *Utricularia striatula* Sm.

PEDALIACEAE

(172) *Pedalium murex* Linn.
(173) *Sesamum indicum* Linn.

MARTYNIACEAE

(174) *Martynia annua* Linn.

ACANTHACEAE

(175) *Asteracantha longifolia* (L.) Nees
(176) *Barleria prattensis* Santapau
(178) *Dipteracanthus prostratus* (Poir.) Nees
(179) *Ecbolium viride* (Forsk.) Alst. var. *dentata* (Clarke) Raizada
(180) *E. viride* (Forsk.) var. *laetevirens* (Clarke) Raizada
(181) *Justicia betonica* Linn.
(182) *J. procumbens* Linn.
(183) *J. simplex* D. Don
(184) *Lepidagathis trinervis* Nees
(185) *Neuracanthus sphaerostachyus* (Nees) Dalz.

VERBENACEAE

(186) *Duranta repens* Linn.
(187) *Premna corymbosa* (Burm. f.) Rottl. & Willd.
(188) *Stachytarpheta jamaicensis* Vahl
(189) *Tectona grandis* Linn. f.

LABIATAE

(190) *Hyptis suaveolens* (L.) Poit.
(191) *Leucas aspera* (Willd.) Spreng.
(192) *Ocimum americanum* Linn.
(193) *O. gratissimum* Linn.

AMARANTHACEAE

(194) *Achyranthes aspera* Linn.
(195) *Aerva lanata* (L.) Juss.
(196) *Alternanthera ficoidea* (L.) R. Br.
(197) *A. pungens* H. B. K.
(198) *Celosia argentea* Linn.
(199) *Digera muricata* (L.) Mart.

PIPERACEAE

(200) *Peperomia pellucida* (L.) H. B. K.

EUPHORBIACEAE

(201) *Acalypha ciliata* Forsk.
(202) *A. indica* Linn.
(203) *Bridelia hamiltoniana* Wall. ex Muell.-Arg.
(204) *B. retusa* (L.) Spreng.
(205) *B. squamosa* (Lamk.) Gehrm.
(206) *Excoecaria agallocha* Linn.
(207) *Jatropha curcas* Linn.
(208) *J. gossypifolia* Linn.
(209) *Kirganelia reticulata* (Poir.) Baill.

(210) *Melanthesa turbinata* (Koen. ex Roxb.) Wt.
(211) *Phyllanthus fraternus* Webst.
(212) *P. maderaspatensis* Linn.
(213) *P. urinaria* Linn.
(214) *Securinega leucopyrus* (Willd.) Muell.-Arg.
(215) *S. virosa* (Roxb. ex Willd.) Pax & Hoffm.

ULMACEAE

(216) *Trema orientalis* (L.) Blume

URTICACEAE

(217) *Fleurya interrupta* (L.) Gaud.
(218) *Pouzolzia zeylanica* (L.) Benn.

ORCHIDACEAE

(219) *Eulophia herbacea* Lindl.
(220) *E. ochreata* Lindl.
(221) *Habenaria commelinifolia* Wall.
(222) *H. grandiflora* Lindl.
(223) *H. marginata* Coleb.
(224) *H. ovalifolia* Wt.

ZINGIBERACEAE

(225) *Costus speciosus* (Koen. ex Retz.) Sm.
(226) *Curcuma inodora* Blatter.

AMARYLLIDACEAE

(227) *Crinum latifolium* Linn.
(228) *C. asiaticum* Linn.
(229) *Pancratium parvum* Dalz.

HYPOXIDACEAE

(230) *Curculigo orchioides* Gaertn.

TACCACEAE

(231) *Tacca leontopetaloides* (L.) O. K.

DIOSCOREACEAE

(232) *Dioscorea bulbifera* Linn.
(233) *D. hispida* Dennst.
(234) *D. pentaphylla* Linn.

LILIACEAE

(235) *Chlorophytum borivilianum* Sant. & Fernandez
(236) *C. tuberosum* (Roxb.) Baker
(237) *Gloriosa superba* Linn.
(238) *Dipcadi saxorum* Blatter.
(239) *Iphigenia indica* Gray.
(240) *Scilla hyacinthina* (Roth) Macbr.

COMMELINACEAE

(241) *Commelina benghalensis* Linn.
(242) *C. hasskarlii* Clarke
(243) *C. nudiflora* Linn.
(244) *C. paludosa* Bl.
(245) *C. suffruticosa* Bl.
(246) *Cyanotis axillaris* (L.) Schult. f.
(247) *C. cristata* (L.) Schult. f.
(248) *C. fasciculata* (Heyne ex Roth) Schult. f.
(249) *Murdannia nudiflorum* (L.) Brenan
(250) *M. scapiflorum* (Roxb.) Royle
(251) *M. semiteres* (Dalz.) Santapau
(252) *M. spiratum* (L.) Brueck.
(253) *M. versicolor* (Dalz.) Brueck.

PANDANACEAE

(254) *Pandanus tectorius* Soland. ex Parkin.

ARACEAE

(255) *Amorphophallus campanulatus* (Roxb.) Bl.
(256) *A. commutatus* (Schott) Engl.
(257) *A. bulbifer* Bl.
(258) *Ariopsis peltata* Nimmo
(259) *Arisaema murrayi* (Grah.) Hk. f.
(260) *Theriophonum indicum* (Dalz.) Engl.
(261) *Colocasia esculenta* (L.) Schott.

ALISMATACEAE

(262) *Alisma oligococcum* F. Muell.

APONOGETONACEAE

(263) *Aponogeton natans* (L.) K. & E.

ERIOCAULACEAE

(264) *Eriocaulon cinereum* R. Br.
(265) *E. dianae* Fyson
(266) *E. dianae* var. *longibracteatum* Fyson
(267) *E. eleanorae* Fyson
(268) *E. gracilis* Mart.
(269) *E. humile* Mold.
(270) *E. sollyanum* Royle
(271) *E. vanheurckii* Muell.-Arg.

ACKNOWLEDGEMENTS

The author is deeply grateful to Rev. Fr. Santapau for his help and valuable suggestions in preparation of this paper. The author is also thankful to Dr. H. Moldenke, Curator and Administrator, New York Botanical Gardens, New York, for the identification of the *Eriocaulon* sp.

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