

**PATAGONIA'S DIVERSE BUT HOMOGENEOUS EARLY PALEOCENE  
FORESTS: ANGIOSPERM LEAVES FROM THE DANIAN SALAMANCA AND  
PEÑAS COLORADAS FORMATIONS, SAN JORGE BASIN, CHUBUT,  
ARGENTINA**

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**APPENDIX 1: Specimen lists for each angiosperm leaf morphotype by locality, for fossil samples housed in the Paleobotanical Collections of Museo Paleontológico Egidio Feruglio, Trelew, Chubut Province, Argentina (acronym MPEF-Pb). Additional referred specimens are cited by field numbers, which are prefixed by collection locality (Table 1) with MPEF-Pb repository number added when assigned. See Table 2 for an inventory of historic type material housed at USNM.**

Field number prefixes correspond to the following localities in Chubut Province (see Geological Setting for more details):

PL1: Palacio de los Loros, quarry 1.

PL2: Palacio de los Loros, quarry 2.

PL4: Palacio de los Loros, quarry 4.

OR1: Ormachea Petrified Forest Park, quarry 1.

OR2: Ormachea Petrified Forest Park, quarry 2.

CS: Ormachea Petrified Forest Park, Cerro Solo quarry.

CP: Ormachea Petrified Forest Park, Cerro de las Palmeras quarry.

DR: Ormachea Petrified Forest Park, Dromedario Hill quarry.

LF: Las Flores oil field quarry (La Campanita Ranch). Field-censused collections from the same quarry in different years (2005 and 2006, LF5 and LF6, respectively), are combined as a single LF collection in Table 1.

**Specimen lists by leaf morphotype.**

**Morphotype SA001** (Akaniaceae?) Figure 5.

**Morphotype exemplar:** MPEF-Pb-2020 (PL2-493). Figure 5B, 5H.

**Additional referred specimens:** **PL1-** 1041, 1054 (MPEF-Pb-4000), 1174. **PL2-** 172, 269 (MPEF-Pb-9797), 557 (MPEF-Pb-4001), 913 (MPEF-Pb-4002), 1111 (MPEF-Pb-4003), 1234 (MPEF-Pb-9000), 1255 (MPEF-Pb-4004), 1417 (MPEF-Pb-4005), 1437, 1444, 1481 (MPEF-Pb-9001). **OR1-** 09 (MPEF-Pb-9002).

**Morphotype SA002.** Figure 6.

**Morphotype exemplar:** MPEF-Pb-2021 (PL2-1239). Figure 6A, 6F.

**Additional referred specimens:** **PL1-** 2 (MPEF-Pb-9004), 70, 237, 348, 386, 396, 543 (MPEF-Pb-4006), 570, 653, 697, 785, 989 (MPEF-Pb-4007), 1026 (MPEF-Pb-4008),

1169, 1498. **PL2-** 58 (MPEF-Pb-9005), 139, 604, 804, 897, 1167 (MPEF-Pb-4009), 1202 (MPEF-Pb-4010), 1209 (MPEF-Pb-4011), 1346, 1373, 1468, 1498 (MPEF-Pb-9003), 1520. **LF5-** 1 (MPEF-Pb-9006), 29, 43, 76, 84, 85, 96. **LF6-** 59 (MPEF-Pb-9852), 97, 99, 154, 181, 203, 225, 302 (MPEF-Pb-9858), 306, 340, 341, 398, 428, 477, 610.

**Morphotype SA004** “*Dryophyllum*” *australis* Berry, 1937 (Nothofagace). Figure 7B-M. **Morphotype exemplar:** MPEF-Pb-2022 (PL2-1238). Figure 7C. **Accessory exemplar:** MPEF-Pb-2053 (PL2-1448). Figure 7D-E.

**Additional referred specimens:** **PL1-** 10 (MPEF-Pb-9009), 41 (MPEF-Pb-4012), 50, 56, 59 (MPEF-Pb-9818), 75, 76, 92, 100 (MPEF-Pb-4013), 105, 109, 112, 113, 133, 149, 150, 156, 161 (MPEF-Pb-4014), 175, 186, 194, 201, 241, 282, 314, 352, 359, 362, 391, 392 (MPEF-Pb-9011), 404, 409, 452, 485, 503, 542, 555 (MPEF-Pb-9807), 633, 675 (MPEF-Pb-4015), 682 (MPEF-Pb-9008), 715, 722, 729, 740 (MPEF-Pb-4016), 748, 775, 793, 812, 816, 832, 844, 846, 850 (MPEF-Pb-9007), 864, 867, 870, 882, 893, 913, 924, 976 (MPEF-Pb-6560), 991, 995, 1001, 1010, 1146, 1161, 1166 (MPEF-Pb-9010), 1177. **PL2-** 122, 494, 562 (MPEF-Pb-9792), 783, 837, 900, 1024, 1103 (MPEF-Pb-4017), 1109, 1190, 1340, 1420, 1432 (MPEF-Pb-9012), 1446 (MPEF-Pb-4018), 1492, 1502, 1501. **PL4-** 87, 88, 91, 145. **CS-** 6, 6'. **DR-** 7, 8, 12. **LF5-** 10, 18, 22, 33, 34, 37, 159. **LF6-** 2, 6, 8, 10, 25, 30 (MPEF-Pb-6545), 31, 38, 40 (MPEF-Pb-9855), 44, 50, 51, 53, 61, 62 (MPEF-Pb-6546), 71-73, 81, 106, 107, 121, 123, 139, 152, 167, 168, 177, 212, 215, 219, 221, 223, 228-229 (MPEF-Pb-9873), 232 (MPEF-Pb-9878), 233, 245, 255, 270, 271, 273, 278, 279 (MPEF-Pb-9843), 290, 292, 298, 304, 316, 318, 346, 354, 355, 358, 371, 377, 393 (MPEF-Pb-9863), 394, 396, 406, 409, 424, 438, 443, 451, 452, 464, 465, 467, 507, 510, 515, 525, 527, 541, 542, 552, 553, 564, 568, 573, 574, 575, 585, 592, 617, 618, 630, 632, 634.

**Morphotype SA005** (Cunoniaceae?) Figure 8.

**Morphotype exemplar:** MPEF-Pb-2023 (PL2-1063). Figure 8D.

**Additional referred specimens:** **PL1-** 85, 86, 239, 344 (MPEF-Pb-4019), 360, 364, 439, 951 (MPEF-Pb-4020), 956, 958 (MPEF-Pb-4021), 1032, 1141 (MPEF-Pb-4022). **PL2-** 106, 516, 517, 904 (MPEF-Pb-4023), 953, 976 (MPEF-Pb-4024), 1095 (MPEF-Pb-4025), 1177, 1221 (MPEF-Pb-4026). **PL4-** 62, 375. **OR1-** 29 (MPEF-Pb-9014), 31 (MPEF-Pb-9013), 34 (MPEF-Pb-9017), 38 (MPEF-Pb-9016). **CS-** 2 (MPEF-Pb-9015). **LF6-** 32, 144, 163, 460.

**Morphotype SA008** (Rosaceae) Figure 9.

**Morphotype exemplar:** MPEF-Pb-2024 (PL1-884). Figure 9A.

**Additional referred specimens:** **PL1-** 2 (MPEF-Pb-9020), 8 (MPEF-Pb-9024), 47, 54, 131, 138 (MPEF-Pb-4027), 140, 168, 176, 198, 213, 233, 257, 297, 307, 337, 340, 377, 394 (MPEF-Pb-4028), 443, 476, 514, 520, 552, 580 (MPEF-Pb-4029), 587, 589 (MPEF-Pb-4030), 598, 617, 628, 630, 655, 669, 693 (MPEF-Pb-4031), 709 (MPEF-Pb-9018), 719, 724, 737, 746, 774, 780, 815, 865, 946, 963, 987, 1002, 1020, 1045, 1117, 1119,

1162, 1233. **PL2-** 95, 251, 448, 484, 640 (MPEF-Pb-4032), 663, 777 (MPEF-Pb-9788), 892, 1019 (MPEF-Pb-4033), 1029, 1188, 1326. **PL4-** 49, 52, 70, 71, 72, 73, 74, 77, 78, 79, 81, 82, 83, 84, 85, 94, 95, 248, 279, 280, 282, 283, 284, 286, 287, 289, 290, 292, 295, 298, 302, 303, 304, 350. **OR1-** 2 (MPEF-Pb-9022), 4 (MPEF-Pb-9019), 7 (MPEF-Pb-9021), 46 (MPEF-Pb-9025). **OR2-** 124, 125, 127. **DR-** 21 (MPEF-Pb-9023). **LF6-** 9, 108, 272, 627.

**Morphotype SA009** “*Cissites*” *patagonica* Berry, 1937. Figures 10, 11.

**Morphotype exemplar:** MPEF-Pb-2025 (PL2-1174). Figure 10A. **Accessory exemplar:** MPEF-Pb-2054 (PL2-1049). Figure 10J.

**Additional referred specimens:** **PL1-** 2a (MPEF-Pb-9147), 2b (MPEF-Pb-9148), 6, 9 (MPEF-Pb-9799), 10, 11 (MPEF-Pb-4034), 15b (MPEF-Pb-9151), 20, 28-31, 48, 55, 62, 71, 72, 80, 82, 84, 106-108, 117, 119, 129, 132, 143, 159, 170, 171, 180, 199, 203, 209 (MPEF-Pb-9031), 214, 217, 222, 238 (MPEF-Pb-4035), 244, 248 (MPEF-Pb-4036), 251, 256 (MPEF-Pb-9822), 259, 261, 265 (MPEF-Pb-4037), 267, 273, 274, 288, 290, 294, 298, 302, 305, 313 (MPEF-Pb-4038), 319, 321, 322, 326, 331, 332, 335, 342, 345, 351, 368 (MPEF-Pb-6557), 373, 395, 399, 407, 408 (MPEF-Pb-9801), 415-417, 423, 428, 429, 431, 445, 454, 455, 457, 458, 464, 468, 481, 482, 494 (MPEF-Pb-9819), 496, 509, 518, 522, 523, 525, 532-534, 539, 541, 544, 554, 559, 562, 568, 583, 588, 592, 593, 597, 599, 600, 604, 605, 614, 619, 620, 642, 654, 677, 678, 679 (MPEF-Pb-9027), 685, 695, 702 (MPEF-Pb-9032), 705, 713, 717, 718, 726, 727, 734, 739, 749, 750, 756, 769, 787, 789, 794, 810, 819, 820, 826, 829, 831, 834, 835, 839, 842, 853, 866, 878, 899, 902, 905, 906, 909, 918, 931, 935, 937, 942, 943, 948, 957, 964, 966, 971, 972, 981, 982, 986, 1005, 1006, 1007 (MPEF-Pb-9823), 1009, 1015, 1024, 1025, 1034, 1039, 1043, 1049, 1052, 1055, 1061 (MPEF-Pb-9030), 1072, 1086, 1087, 1091, 1093 (MPEF-Pb-9812), 1094, 1101, 1107, 1109 (MPEF-Pb-9800), 1118, 1123, 1125, 1127, 1130, 1147, 1150, 1179, 1183, 1280. **PL2-** 53, 114, 312, 384 (MPEF-Pb-4039), 401, 411, 416, 441, 478, 485, 487, 492, 495, 498 (MPEF-Pb-4040), 500, 503, 506, 511, 512 (MPEF-Pb-4041), 526, 528, 534, 538, 545, 563, 564 (MPEF-Pb-9821), 574, 575, 587, 608, 644, 685, 686 (MPEF-Pb-9765), 713, 735, 768, 799, 800, 801, 811, 820, 850, 851, 856 (MPEF-Pb-9029), 873, 877, 878, 884, 903, 905, 916, 952, 957, 958, 960, 961, 962, 971, 982, 1021 (MPEF-Pb-9789), 1031, 1037, 1040, 1046, 1048, 1060 (MPEF-Pb-9028), 1065, 1066, 1088, 1090, 1101, 1110, 1115, 1119, 1120, 1122, 1129, 1132, 1134-1137, 1139 (MPEF-Pb- (MPEF-Pb-9796), 1141, 1148, 1149, 1152, 1153, 1155, 1156, 1159, 1160, 1166, 1175, 1180, 1181, 1189, 1192, 1193 (MPEF-Pb-9778), 1198, 1203, 1205, 1210, 1213, 1216-1218, 1230, 1231, 1236, 1240, 1241 (MPEF-Pb-4042), 1242, 1246, 1247, 1251, 1252, 1257, 1264, 1266, 1268, 1269, 1272, 1276 (MPEF-Pb-9026), 1288, 1289, 1297, 1299, 1303, 1307, 1310, 1311, 1327, 1333, 1345, 1362, 1366, 1376, 1378, 1387 (MPEF-Pb-6567), 1390 (MPEF-Pb-9777), 1395, 1401, 1402, 1406, 1416, 1433-1437, 1439, 1447, 1457, 1462 (MPEF-Pb-9780), 1470, 1476, 1477, 1487, 1488, 1491, 1493-1497, 1499, 1505, 1509, 1550, 1884, 1981. **PL4-** 3, 5, 6, 7, 10, 11, 12, 14, 16, 17, 18, 19, 20, 38, 68, 133, 135, 139, 146, 163, 184, 188, 198, 224, 230, 231, 232, 233, 234, 235, 236,

238, 239, 240, 242, 245, 246, 345, 346, 348, 349, 351, 353. **OR1-** 17. **CS-** 2 (MPEF-Pb-9146), 3 (MPEF-Pb-9152), 5 (MPEF-Pb-9145), 6; **LF5-** 77, 91. **LF6-** 7, 21 (MPEF-Pb-9851), 27, 78, 112 (MPEF-Pb-9871), 124, 127, 151, 166, 167, 171, 185, 187, 220, 235, 236, 251, 267, 275 (MPEF-Pb-9874), 391, 526, 533, 549, 602, 621, 631.

**Morphotype SA010** (Lauraceae) Figures 12, 13.

**Morphotype exemplar:** MPEF-Pb-2026 (PL2-1265). Figure 12M. **Accessory exemplar:** MPEF-Pb-2055 (PL2-1120). Figure 12H-I.

**Additional referred specimens:** **PL1-** 1 (MPEF-Pb-9047), 2 (MPEF-Pb-9049), 9a (MPEF-Pb-9051), 9b (MPEF-Pb-9052), 11 (MPEF-Pb-9042), 12 (MPEF-Pb-9044), 58, 63, 64, 69, 77, 93 (MPEF-Pb-9802), 95, 97, 103, 104, 111, 124-127, 130, 145, 146 (MPEF-Pb-9036), 147, 151, 166, 167, 173, 174, 179, 181, 183 (MPEF-Pb-9856), 193, 196, 202, 206, 207, 208, 212 (MPEF-Pb-4043), 221, 223, 232, 246, 249, 250, 254 (MPEF-Pb-9816), 263 (MPEF-Pb-6555), 272, 276, 278-280, 283, 285, 286, 292, 295, 296 (MPEF-Pb-9805), 299, 303, 307, 309 (MPEF-Pb-4044), 315, 316 (MPEF-Pb-4045), 324, 328, 333 (MPEF-Pb-4046), 334, 341, 347, 357, 363, 366, 367, 369, 376, 382, 384, 385, 389, 390, 397, 402 (MPEF-Pb-9810), 403, 419, 421, 424, 426, 435, 440, 448, 456, 462, 463, 466, 472, 477, 488, 490 (MPEF-Pb-9039), 493, 497, 504, 536, 553, 561, 566, 569, 571, 573, 578, 581, 586, 590, 594, 607, 613, 618, 623, 627, 629, 638, 639, 640, 641, 645, 649, 656, 661, 664, 670, 673, 676, 683, 689, 698, 707, 714, 716, 720, 730, 732, 760, 771, 773 (MPEF-Pb-9817), 778, 791, 795, 797, 799, 800, 805-807, 809 (MPEF-Pb-9040), 813 (MPEF-Pb-9820), 825, 827, 830, 841, 843 (MPEF-Pb-9814), 863, 874, 876, 888, 898, 903, 914, 922, 923, 926, 930, 939, 947, 953, 955, 965, 974, 977, 978, 985, 1003, 1017, 1030, 1035, 1036, 1057, 1062 (MPEF-Pb-9033), 1064, 1074, 1077, 1080, 1084, 1096, 1097, 1103, 1104, 1108, 1110, 1111 (MPEF-Pb-9815), 1133 (MPEF-Pb-9034), 1134, 1138, 1148, 1149, 1151, 1158, 1175, 1192. **PL2-** 2, 7, 10, 22, 64, 70, 72, 78, 78, 82, 99, 111, 122, 143, 176, 181, 245, 287, 300, 305, 325, 327, 375, 379, 400, 404, 455, 474 (MPEF-Pb-4047), 475 (MPEF-Pb-4048), 476 (MPEF-Pb-4049), 491 (MPEF-Pb-3036), 501, 502, 529, 535, 536, 541, 546, 548, 561, 566, 567, 579, 586, 594, 605, 611, 651, 654, 666, 672, 691, 693, 695, 699 (MPEF-Pb-4050), 754, 765, 773, 777, 806, 819, 821, 824, 830, 833, 834, 840-842, 847, 860, 862, 865, 868, 869, 883 (MPEF-Pb-9035), 888, 890 (MPEF-Pb-4051), 891, 912 (MPEF-Pb-9772), 914, 917, 925 (MPEF-Pb-9776), 935, 942, 945, 951 (MPEF-Pb-9770), 954, 956, 967, 969, 977, 984, 998, 1016, 1025, 1026, 1028, 1029, 1030, 1032, 1033, 1035, 1039, 1043, 1057, 1059, 1061, 1075, 1076, 1089, 1096, 1100, 1104, 1107 (MPEF-Pb-9038), 1112, 1114, 1125, 1138, 1140, 1142, 1143, 1145, 1150 (MPEF-Pb-4045), 1151, 1163, 1164, 1171, 1183, 1184, 1187, 1195, 1199, 1200, 1212, 1220, 1226, 1232, 1243, 1244, 1248, 1270, 1275, 1277, 1292, 1294, 1300, 1301, 1308, 1309, 1313, 1315, 1317, 1320, 1330, 1334, 1339, 1342, 1349, 1379, 1383 (MPEF-Pb-9763), 1388, 1389, 1396, 1440-1442, 1455, 1465, 1471, 1475, 1523. **PL4-** 9, 23, 100, 104, 105, 111, 114, 115, 116, 117, 188, 119, 120, 121, 122, 129, 130, 140, 147, 148, 152, 161, 183, 189, 191, 192, 194, 195, 196, 197, 199, 200, 201, 202, 203, 204, 207, 208, 209, 210, 212, 213, 214, 215, 216, 220, 221, 222, 223, 225, 226, 237, 256,

274, 310, 315, 320, 347, 376. **OR1-** 42 (MPEF-Pb-9048). **OR2-** 1-25, 30-35, 37-50, 52, 54- 80, 82, 83, 87-106, 108-112, 119, 120, 138, 143, 147, 148, 157, 162, 165, 174, 176, 202. **DR2-** 11 (MPEF-Pb-9050). **LF5-** 1 (MPEF-Pb-9041), 4 (MPEF-Pb-9045), 6 (MPEF-Pb-9046) 10 (MPEF-Pb-9043), 21, 25, 26, 39, 41, 42, 47-53, 55, 57 (MPEF-Pb-9852), 58-62, 64-68, 70-73, 78, 80-82, 89, 92, 95, 97-99, 101, 148-150, 154-157, 162. **LF6-** 13, 15, 39, 49, 58, 65, 79, 82, 86, 91 (MPEF-Pb-9866), 92, 102, 103, 109-111, 113, 116, 128, 135, 136, 145, 161, 178, 183, 189, 196, 205, 208, 217, 218, 224, 228, 231, 241, 242, 246, 250, 253, 257, 258, 266, 273, 277, 282, 286, 289, 294, 297, 299, 303, 306, 312, 321, 328, 331, 348, 353, 359, 361, 369, 375, 402, 411, 413, 422, 432, 446, 456, 461, 470, 478-480, 485 (MPEF-Pb-9872), 490, 503, 506, 512, 516, 520, 534, 535, 544, 547, 563 (MPEF-Pb-9850), 566, 576, 579, 583, 600, 603-605, 607, 614, 619, 620 (MPEF-Pb-6553), 628, 811.

Morphotype SA014. Figures 14, 15A-D.

**Morphotype exemplar:** MPEF-Pb-2027 (PL1-696). Figure 14C.

**Additional referred specimens:** **PL1-** 1-3, 33, 42-44, 49, 57, 81, 88, 90, 106a (MPEF-Pb-9059), 116b (MPEF-Pb-9060), 137, 142, 144, 148, 164, 172, 210 (MPEF-Pb-9054), 215, 216, 220, 229, 230, 240, 242, 258 (MPEF-Pb-6554), 317, 343 (MPEF-Pb-6556), 346, 355, 358, 374, 380, 400, 433, 438 (MPEF-Pb-9058), 473, 506, 511, 519, 535, 547 (MPEF-Pb-6558), 558, 582 (MPEF-Pb-4053), 606, 615, 616, 632, 634 (MPEF-Pb-6559), 665, 692, 708, 711, 736, 738, 745, 779 (MPEF-Pb-9803), 783, 790 (MPEF-Pb-4054), 796 (MPEF-Pb-4055), 811, 817, 818 (MPEF-Pb-9057), 821, 822, 833, 838, 856, 871, 872 (MPEF-Pb-4056), 877, 895, 933, 954, 968, 1000 (MPEF-Pb-9811), 1016, 1042, 1048, 1069, 1078, 1088, 1090, 1092, 1100, 1112, 1113, 1122, 1135, 1144 (MPEF-Pb-4057), 1194. **PL2-** 6, 18 (MPEF-Pb-9056), 71, 86, 233 (MPEF-Pb-9760), 246, 345, 389, 403 (MPEF-Pb-4058), 410, 413 (MPEF-Pb-9758), 430, 488, 497, 554, 602, 603, 613, 629, 631, 632, 645, 665, 688, 724, 774, 796, 802, 813, 827, 828, 836, 838, 839, 848, 849, 866, 944 (MPEF-Pb-9756), 972, 973, 975, 986, 1005, 1006, 1041, 1064, 1086 (MPEF-Pb-9053), 1092, 1098, 1152, 1155, 1157, 1204, 1206, 1222, 1228 (MPEF-Pb-9771), 1278 (MPEF-Pb-4059), 1375, 1385, 1405, 1409, 1427, 1443, 1478, 1485 (MPEF-Pb-9759), 1507 (MPEF-Pb-9761). **PL4-** 22, 26, 34, 35, 36, 37, 39, 40, 76, 86, 134, 174, 175, 178, 180, 182, 275, 292, 293. **OR2-** 1683. **LF5-** 1 (MPEF-Pb-9061), 6 (MPEF-Pb-9062), 30-32, 74, 151. **LF6-** 28, 60, 88, 95, 129 (MPEF-Pb-9869), 186, 186, 192, 256, 262 (MPEF-Pb-9848), 315, 325, 403, 473, 486 (MPEF-Pb-6550), 523, 539, 546 (MPEF-Pb-6552), 551, 625.

Morphotype SA016. Figures 16A-E, 19F-I.

**Morphotype exemplar:** MPEF-Pb-2028 (PL2-1461a, b). Figure 16A.

**Additional referred specimens:** **PL1-** 24 (MPEF-Pb-9091), 467 (MPEF-Pb-4060), 910 (MPEF-Pb-4061). **PL2-** 79, 84 (MPEF-Pb-9067), 280, 312, 444, 499, 515, 525, 540, 598, 612, 623, 667, 702, 797, 803, 863, 895, 941 (MPEF-Pb-4062), 1215 (MPEF-Pb-4063),

1279 (MPEF-Pb-4064), 1287, 1290 (MPEF-Pb-9068), 1430 (MPEF-Pb-4065), 1482.  
**LF6-** 207, 510, 538, 560, 571. **OR1-** 42 (MPEF-Pb-9094). **DR-** 5 (MPEF-Pb-9092).

**Morphotype SA019.** Figures 15E-I, 17.

**Morphotype exemplar:** MPEF-Pb-2029 (PL2-1883 a, b). Figure 17A, 17D-E.

**Additional referred specimens:** **PL1-** 15 (MPEF-Pb-9064), 65, 98, 106c (MPEF-Pb-9063), 106d (MPEF-Pb-9066), 177 (MPEF-Pb-4066), 182, 187, 188, 228, 245, 252 (MPEF-Pb-4067), 264, 281, 289, 356 (MPEF-Pb-4068), 371 (MPEF-Pb-9073), 372, 375, 378, 383, 410 (MPEF-Pb-4069), 413, 441, 444, 450, 471 (MPEF-Pb-9076), 500, 507, 508, 527, 528, 545, 549, 560, 564, 565, 584, 626, 648, 657, 699, 701, 712, 731, 744, 751, 766, 768, 777, 847, 859, 916, 940 (MPEF-Pb-9074), 941, 950 (MPEF-Pb-9075), 984, 992, 1059, 1070, 1098, 1128, 1136. **PL2-** 209, 409 (MPEF-Pb4071), 509, 610, 630 (MPEF-Pb-4072), 662 (MPEF-Pb-9755), 902, 978, 1008 (MPEF-Pb-9764), 1058, 1126, 1168, 1219, 1237 (MPEF-Pb-9072), 1245, 1286, 1304, 1392, 1490 (MPEF-Pb-4073), 1500 (MPEF-Pb-9149). **PL4-** 15, 25, 27, 30, 31, 32, 33, 41, 42, 43, 63, 67, 89, 97, 110, 138, 155, 164, 166, 167, 169, 170, 171, 172, 179, 185, 187, 247. **OR1-** 01b (MPEF-Pb-9065). **OR2-** 168. **LF6-** 22, 74, 75, 247, 259, 327, 403, 441, 449 (MPEF-Pb-9853), 581, 496.

**Morphotype SA020** (Cunoniaceae). Figures 18, 19A-E.

**Morphotype exemplar:** MPEF-PB-2030 (PL2-1144). Figure 18A, 18F. **Accessory exemplar:** MPEF-PB-3020 (PL2-520). Figure 18G, 18K.

**Additional referred specimens:** **PL1-** 79, 551, 767, 952 (MPEF-PB-4074). **PL2-** 9, 13, 15 33, 35, 41, 45, 55, 59, 67, 80, 87, 97, 100 (MPEF-PB-9077), 109, 155, 160, 179 (MPEF-PB-9083), 187, 189, 189, 192 (MPEF-PB-4075), 193, 217, 223, 228, 229 (MPEF-Pb-9769), 236, 239, 248, 249, 255, 256, 266 (MPEF-PB-9078), 267, 282, 304, 306, 313, 317, 320, 324, 338, 351, 356, 366, 373, 395, 428, 432, 436, 447, 451, 456, 461, 473 (MPEF-PB-4076), 481, 490, 519, 527, 532, 542, 576 (MPEF-PB-9081), 608, 611, 617, 648, 652 (MPEF-PB-6565), 653, 655, 675, 730, 732, 745, 755, 756, 791, 793, 794, 804, 810, 816, 826, 840, 852, 864 (MPEF-PB-4077), 870, 885 (MPEF-PB-9082), 893, 894, 906, 907, 928, 949, 965 (MPEF-PB-9085), 980, 1017, 1020, 1052, 1067 (MPEF-PB-9079), 1073, 1074, 1113, 1117, 1127 (MPEF-Pb-9762), 1130, 1182, 1191, 1211, 1256, 1262 (MPEF-PB-9084), 1283, 1296, 1306, 1322, 1336, 1344, 1353, 1360, 1426, MPEF-PB-9080 (PL2-1513), 2371 (MPEF-Pb-9154), 2395 (MPEF-Pb-9155). **PL4-** 45, 46, 56, 93, 144, 330, 338, 355. **OR1-** 20 (MPEF-PB-9090), 22 (MPEF-PB-9089), 26 (MPEF-PB-9088). **OR2-** 160, 161. **DR-** 24b (MPEF-PB-9087). **LF6-** 37, 77, 172, 229, 254 (MPEF-Pb-9854), 399, 412, 421, 432, 447, 499, 580, 540.

**Morphotype SA032** (Arecaceae) Figure 41A-C.

**Morphotype exemplar:** MPEF-PB-3021 (PL1-651). Figure 41A. **Accessory exemplar:** MPEF-PB-3022 (PL1-260). Figure 41B.

**Additional referred specimens: PL1-** 153, 425, 786, 814, 735, 757, 758, 1169, 1171, 1178, 1181, 1188, 1190, 1191. **PL2-** 1168; **OR2-** 81, 84; **LF5-** 63, 158 (MPEF-PB-9144).

**Morphotype SA035** (Bixacaeae ?) Figures 19J-K, 20.

**Morphotype exemplar:** MPEF-PB-2031 (PL1-894). Figures 19J, 20A, 20C.

**Additional referred specimens: PL1-** 165, 353, 480, 526, 540 (MPEF-Pb-9824), 700 (MPEF-PB-4078), 706, 855 (MPEF-PB-4079), 961, 969, 1058. **PL2-** 17, 39, 147, 357, 396, 486 (MPEF-PB-6563), 621 (MPEF-Pb-9795), 805 (MPEF-PB-9097), 845 (MPEF-PB-4080), 867, 950 (MPEF-PB-4081), 968, 1108, 1133 (MPEF-PB-4082), 1176, 1216, 1229, 1371 (MPEF-PB-9096), 1374, 1397 (MPEF-PB-9098), 1399, 1489 (MPEF-PB-4083). **PL4-** 13. **LF5-** 54, 75, 153. **LF6-** 52, 184, 201, 202, 231, 389, 504.

**Morphotype SA038.** Figures 21C, 22I.

**Morphotype exemplar:** MPEF-Pb-3033 (OR2-170). Figures 21C, 22I. **Accessory exemplar:** MPEF-Pb-3034 (OR2-177)

**Additional referred specimens: OR2-** 169, 172, 173.

**Morphotype SA039** “*Paranymphaea*” *aristolochiafomis* Berry, 1937. Figures 21A-B, 22A-H.

**Morphotype exemplar:** MPEF-Pb-2032 (PL1-945). Figures 21B, 22B, 22D.

**Additional referred specimens: PL1-** 21, 102, 447 (MPEF-PB-9100), 753 (MPEF-PB-9101), 860 (MPEF-PB-9099), 908 (MPEF-PB-4084), 949, 1137, 1189. **PL4-** 28,29, 96, 300. **LF5-** 9, 83, 94. **LF6-** 345, 357, 370.

**Morphotype SA040.** Figures 21D, 22J-M.

**Morphotype exemplar:** MPEF-Pb-2033 (PL1-1012). Figures 21D, 22J.

**Additional referred specimens: PL1-** 7 (MPEF-PB-9102), 1075 (MPEF-PB-9104), 1114. **PL2-** 62 (MPEF-PB-9103).

**Morphotype SA041** (Rhamnaceae). Figures 19L-M, 23A-I.

**Morphotype exemplar:** MPEF-Pb-2034 (PL1-1154). Figures 19L, 23A.

**Additional referred specimens: PL1-** 219 (MPEF-Pb-4085), 253 (MPEF-Pb-4086), 291 (MPEF-Pb-4087), 329 (MPEF-Pb-4088), 470 (MPEF-Pb-4089), 1021, 1037. **PL2-** 48, 66, 68, 85, 91, 105, 420, 482, 483 (MPEF-Pb-4090), 507, 515, 711, 741 (MPEF-Pb-4091), 798, 801, 846, 861, 897, 934 (MPEF-Pb-9105), 955, 1000, 1012, 1094, 1105 (MPEF-Pb-4092), 1118, 1253, 1281, 1312, 1332, 1358, 1386, 1415 (MPEF-Pb-9095), 1418, 1424, 1425,1431, 1451, 1452, 1467, 1531 (MPEF-Pb-9107), 1580 (MPEF-Pb-9781). **PL4-** 218, 241.

**Morphotype SA042** *Fagophyllum duseni* Berry, 1937. Figures 16F-M, 25A-D.

**Morphotype exemplar:** MPEF-Pb-2035 (PL1-836). Figure 16F.

**Additional referred specimens:** **PL1-** 32, 218, 270, 277 (MPEF-Pb-4093), 301, 350, 365, 379, 483, 502 (MPEF-Pb-4094), 647, 660, 674 (MPEF-Pb-4095), 721 (MPEF-Pb-4096), 782, 868 (MPEF-Pb-9069), 897, 921, 936, 938, 983, 1053 (MPEF-Pb-4097), 1076 (MPEF-Pb-9070), 1121. **PL2-** 173, 385, 1208 (MPEF-Pb-4098), 2364 (MPEF-Pb-9156). **PL4-** 262, 268, 269, 270, 281, 297, 305. **OR1-** 22 (MPEF-Pb-9113). **LF5-** 24 (MPEF-Pb-9071). **LF6-** 55 (MPEF-Pb-9865), 89, 90 (MPEF-Pb-6547), 114 (MPEF-Pb-9868), 141 (MPEF-Pb-6548), 239, 244 (MPEF-Pb-9847), 249, 265, 344, 347.

**Morphotype SA043** (Cunoniaceae?) Figures 24A-G, 25E-F.

**Morphotype exemplar:** MPEF-Pb-2036 (PL2-73) Figure 24A. **Accessory exemplars:** MPEF-Pb-3023 (PL2-83) Figure 24B, and MPEF-Pb-9110 (PL2-714) Figure 24C.

**Additional referred specimens:** **PL1-** 781 (MPEF-Pb-4099). **PL2-** 5, 23, 112, 153, 185, 196, 216, 230, 240, 254, 270, 278, 314, 321 (MPEF-Pb-6561), 326, 334, 340, 341 (MPEF-Pb-9158), 342, 365, 374, 414, 442, 452, 469 (MPEF-Pb-4100), 510, 571, 573, 580, 619 (MPEF-Pb-4101), 647, 703, 710 (MPEF-Pb-9782), 728, 738, 742, 758, 788, 789, 809, 817, 886, 931, 1036, 1038, 1355 (MPEF-Pb-4102), 1454, 1484, 2370 (MPEF-Pb-9159), 2372 (MPEF-Pb-9157). **PL4-** 44, 47, 48, 50, 53, 54, 61, 301, 317, 324, 325, 328. **OR2-** 118, 121, 122, 123, 163. **LF6-** 160.

**Morphotype SA044** (Cunoniaceae) Figures 23J-O, 25G-H.

**Morphotype exemplar:** MPEF-Pb-2037 (PL1-980). Figures 23K, 23O, 25G-H.

**Accessory exemplar:** MPEF-Pb-3024 (PL1-596). Figure 23L.

**Additional referred specimens:** **PL1-** 14, 16, 27, 67, 73, 74, 128, 162, 163, 185, 190, 200, 231, 287, 304 (MPEF-Pb-9108), 349, 370, 388, 412, 427 (MPEF-Pb-4103), 436, 442, 446, 459, 461 (MPEF-Pb-4104), 465, 475, 486, 505, 517, 530, 531, 548, 563, 631 (MPEF-Pb-9109), 659, 666, 667, 728, 776 (MPEF-Pb-4105), 858, 883, 885, 887 (MPEF-Pb-4106), 900, 911, 912, 917, 960, 1031, 1038, 1047, 1066, 1085, 1115, 1131 (MPEF-Pb-4107), 1132, 1142, 1143. **PL2-** 103, 328 (MPEF-Pb-4108), 451, 576, 609 (MPEF-Pb-4109), 703, 802, 890, 920, 1002, 1013, 1521. **PL4-** 51, 58, 59, 60, 99, 103, 109, 112, 219, 257, 314, 343, 344, 354. **OR2-** 116, 158, 159. **LF6-** 63, 77, 153, 153, 176, 188, 197, 198, 269, 368, 439, 514, 611.

**Morphotype SA045** (Fabaceae) Figures 24H-L, 25J.

**Morphotype exemplar:** MPEF-Pb-2038 (PL1-53). Figures 24I-L, 25J.

**Additional referred specimens:** **PL1-** 24 (MPEF-Pb-4110), 336, 873 (MPEF-Pb-4111).

**Morphotype SA046** *Laurophyllum chubutensis* Berry, 1937 (Lauraceae) Figures 25I, 26A-F.

**Morphotype exemplar:** MPEF-Pb-2039 (PL1-852). Figures 25I, 26A-B **Accessory exemplar:** MPEF-Pb-3025 (PL1-327). Figure 26E.

**Additional referred specimens:** **PL1-** 38, 68, 78, 87, 89, 122, 123, 135, 189, 197, 211, 224 (MPEF-Pb-4112), 226, 243 (MPEF-Pb-4113), 255, 311, 327 (MPEF-Pb-4114), 354



(MPEF-Pb-4115), 381 (MPEF-Pb-9114), 405, 489, 491, 498, 501, 512, 538, 546, 550, 595, 643 (MPEF-Pb-4116), 650, 662, 671, 680, 686, 725, 754, 759, 837 (MPEF-Pb-9808), 862 (MPEF-Pb-4117), 880, 881, 970, 973, 994, 996, 1023, 1040, 1046, 1060, 1083, 1140, 1173, 1185, 1186. **PL2-** 390, 748 (MPEF-Pb-4118), 782, 857, 1207, 1466, 1694 (MPEF-Pb-4119). **PL4-** 24, 75, 106, 107, 108, 125, 126, 127, 128, 131, 149, 150, 158, 159, 206, 251, 254, 255, 261, 271, 272, 273, 278, 337, 363. **OR2-** 36.

**Morphotype SA047.** Figures 26G-L, 27A.

**Morphotype exemplar:** MPEF-Pb-2040 (PL2-1506). Figures 26G, 26K, 27A.

**Additional referred specimens:** **PL1-** 61 (MPEF-Pb-4129), 94, 110 (MPEF-Pb-4121), 121, 178, 192, 266 (MPEF-Pb-9806), 284, 361, 585, 602, 684, 762, 784 (MPEF-Pb-4122), 886 (MPEF-Pb-9804), 959, 1099, 1172. **PL2-** 43, 98, 146, 149, 162 (MPEF-Pb-4123), 220, 234, 268, 286, 362, 364, 381, 406, 422, 581, 672, 681, 687, 740, 749, 764, 823, 858, 1093, 1102, 1121, 1154, 1172, 1261 (MPEF-Pb-4124), 1341 (MPEF-Pb-9116), 1400, 1408, 1413, 1445, 1459, 1472 (MPEF-Pb-9117), 1503. **PL4-** 359, 360. **OR2-** 126. **LF5-** 5. **LF6-** 36, 162, 164 (MPEF-Pb-9849), 199, 204, 227, 230, 235, 293 (MPEF-Pb-6568), 420, 427, 491, 495, 537, 558.

**Morphotype SA048** (Rhamnaceae) Figures 27B-D, 28A-G.

**Morphotype exemplar:** MPEF-Pb-2041 (PL1-603). Figures 27B, 28D.

**Additional referred specimens:** **PL1-** 15 (MPEF-Pb-4125), 25, 37, 66, 108, 114 (MPEF-Pb-4126), 141, 154, 169 (MPEF-Pb-4127), 225 (MPEF-Pb-4128), 227 (MPEF-Pb-4129), 235, 236, 262, 268, 269, 275, 306, 308, 310, 323, 330, 338, 339, 397, 398, 411, 418, 420, 422, 430, 432, 434, 437, 453, 460, 474, 478, 495, 524, 537, 556, 557, 572, 579, 591, 598, 601, 603, 612, 621, 622, 636 (MPEF-Pb-9809), 644, 646, 652, 663, 668, 681, 687, 694, 704, 741, 747, 755, 761, 770, 792, 824, 828, 848, 849, 851, 857, 861 (MPEF-Pb-9119), 901, 919, 925 (MPEF-Pb-9120), 927, 934, 962, 967, 975, 988, 990, 997, 998, 999, 1014, 1018, 1022, 1027, 1029, 1033, 1065, 1068, 1073, 1082, 1106, 1120, 1126, 1172, 1180 (MPEF-Pb-9813), 1187. **PL2-** 27, 533, 577, 1235, 1258 (MPEF-Pb-4130), 1428. **PL4-** 1, 2, 4, 8, 21, 98, 101, 102, 132, 142, 151, 160, 277, 285, 299, 331, 332, 333, 335, 3394, 340, 374. **OR2-** 128. **LF5-** 87, 161. **LF6-** 17, 46, 93, 115, 150, 155, 156, 193, 196, 235, 264, 284, 323, 339, 350, 380, 419, 524 (MPEF-Pb-6551), 608.

**Morphotype SA049** “*Myrica*” *premira* Berry, 1937. Figures 27E-F, 29A-B, 29D-K.

**Morphotype exemplar:** MPEF-Pb-2042 (PL2-38) Figures 27E, 29D. **Accessory exemplars:** MPEF-Pb-3026 (PL2-1260) Figure 29F, and MPEF-Pb-3027 (PL1-234) Figure 29E.

**Additional referred specimens:** **PL1-** 77 (MPEF-Pb-4131), 191, 300 (MPEF-Pb-4132), 469, 479, 484 (MPEF-Pb-4133), 516 (MPEF-Pb-4134), 624 (MPEF-Pb-4135), 743, 752, 772, 889, 1004 (MPEF-Pb-4136), 1063. **PL2-** 1, 8, 14, 19, 20, 21, 26, 28, 29 (MPEF-Pb-9793), 30, 31, 36, 40, 46, 47, 60, 63, 65, 69, 81, 88, 90, 101, 107, 108, 116, 125, 138, 142, 144, 145, 148, 150, 151, 159, 161, 165, 166, 168, 178, 182, 184, 186, 188, 190, 191,

195, 198, 199, 202 (MPEF-Pb-9785), 219, 221, 222, 224, 225, 226, 227, 231, 235, 238, 247, 252, 258, 265, 271, 281, 284, 288, 292, 298, 299 (MPEF-Pb-4137), 306, 307, 308, 309, 310, 315, 316, 318 (MPEF-Pb-4138), 323, 330, 332, 333, 337, 339, 346, 348, 352, 353, 354, 358, 359, 371, 378, 382, 386, 392, 397, 405, 406, 412, 417, 421 (MPEF-Pb-9791), 425 (MPEF-Pb-6562), 425, 426, 434, 437, 439, 445, 449, 453, 454, 460, 471, 479, 519, 521, 522 (MPEF-Pb-6564), 537, 550, 551, 552 (MPEF-Pb-9798), 555, 572, 577 (MPEF-Pb-4139), 585 (MPEF-Pb-9790), 590, 595, 600, 601, 606, 607, 609, 610 (MPEF-Pb-4149), 618, 624, 627, 633, 633, 634, 639, 656, 657 (MPEF-Pb-9118), 664, 668, 669, 671, 673, 674, 678, 680, 694, 701, 704, 705, 706, 707, 709, 717, 718, 726, 727, 729, 733, 734, 736, 744, 750, 759, 761, 769, 776, 778, 779, 780, 787, 795, 812, 815, 825, 831, 831, 832, 844, 854, 871, 874, 875 (MPEF-Pb-9786), 876, 881 (MPEF-Pb-9887), 889, 892 (MPEF-Pb-4141), 896, 915, 918 (MPEF-Pb-4142), 920 (MPEF-Pb-9784), 921, 933, 937, 939, 943, 964, 966, 979, 983, 1001, 1009, 1010, 1022, 1023, 1034, 1042, 1047, 1050, 1054, 1056, 1062, 1068, 1069, 1070, 1072, 1079, 1116, 1159, 1169, 1170, 1173, 1178, 1179 (MPEF-Pb-6566), 1185, 1194, 1197, 1273, 1282, 1285, 1291 (MPEF-Pb-9783), 1295, 1298, 1302 (MPEF-Pb-9794), 1305, 1314, 1316, 1318, 1319, 1328, 1329, 1335, 1337, 1338, 1343, 1348, 1354, 1356, 1357, 1365, 1372, 1380, 1381, 1391, 1393, 1398, 1404, 1419, 1422, 1423, 1438, 1453, 1456, 1508. **PL4-** 66, 90, 92, 141, 173, 193, 249, 253, 258, 259, 260, 267, 294, 307, 308, 311, 318, 322, 323, 278, 279.

**Morphotype SA050** (Anacardiaceae?) Figures 29L-O, 31A-D.

**Morphotype exemplar:** MPEF-Pb-2043 (PL2-599). Figures 29L-M, 31A.

**Additional referred specimens:** **PL2-** 183, 590, 593 (MPEF-Pb-4143), 622 (MPEF-Pb-9123), 731 (MPEF-Pb-4144), 1254, 1411, 1474 (MPEF-Pb-9150), 1521. **OR2-** 185.

**Morphotype SA051** (Urticaceae?) Figures 27G-I, 30A-G.

**Morphotype exemplar:** MPEF-Pb-2044 (PL2-11). Figures 27H-I, 30A-B. **Accessory exemplar:** MPEF-Pb-3028 (PL2-50). Figures 27G, 30C, 30E.

**Additional referred specimens:** **PL1-** 318 (MPEF-Pb-4145), 845 (MPEF-Pb-4146). **PL2-** 1153, 1524.

**Morphotype SA052** (Sapindaceae?) Figures 27J, 28H-I.

**Morphotype exemplar:** MPEF-Pb-2045 (PL1-1124 a,b). Figures 27J, 28I.

**Sample:** MPEF-PB-2045 (PL1-1124 a,b).

**Morphotype SA053.** Figures 30H-J, 31E-F.

**Morphotype Exemplar:** MPEF-Pb-3029 (PL1-688). Figures 30H-I, 31E.

**Additional referred specimens:** **PL1-** 625, 907, 1011, 1163, 1164, 1165, 1176 (MPEF-Pb-9121). **PL2-** 1131. **PL4-** 362. **OR2-** 26, 27, 28, 187, 203.

**Morphotype SA054** (Cunoniaceae) Figures 30M-P, 31G-H.

**Morphotype exemplar:** MPEF-Pb-2046 (PL2-508). Figures 30M, 30P, 31G-H.

**Additional referred specimens: PL1-** 175, 194, 274, 293, 584 (MPEF-Pb-9122), 626, 859, 999 (MPEF-Pb-4147), 1004 (MPEF-Pb-4148).

**Morphotype SA055.** Figures 21E-F, 30K-L.

**Morphotype exemplar:** MPEF-Pb-2047 (PL2-1464).

**Sample:** PL2-1464 (MPEF-Pb-2047).

**Morphotype SA056.** Figures 31L, 32A-C.

**Morphotype exemplar:** MPEF-Pb-2048 (PL1-823). Figures 31L, 32A, 32C.

**Additional referred specimens: PL1-** 247 (MPEF-Pb-4150), 271, 823, 1079 (MPEF-Pb-4151). **PL2-** 369, 380, 765, 790. **PL4-** 113, 217. **OR2-** 51, 182, 183. **LF5-** 6, 56. **LF6-** 53, 76, 195, 372, 452, 609.

**Morphotype SA057.** Figures 31I, 32D-G.

**Morphotype exemplar:** MPEF-Pb-2049 (PL2-518 a,b).

**Sample:** PL2-518 a,b (MPEF-Pb-2049).

**Morphotype SA058** (Malvaceae?) Figures 31J-K, 32H-J.

**Morphotype exemplar:** MPEF-Pb-2050 (PL2-1087). Figures 31J-K, 32H, 32J.

**Accessory exemplar:** MPEF-Pb-3030 (PL1-51).

**Additional referred specimens: PL1-** 393, 401. **PL2-** 121, 781, 1263, 1271, 1407, 1480, 1982. **LF6-** 85 (MPEF-Pb-9867).

**Morphotype SA059.** Figures 32K-M, 33A-B.

**Morphotype exemplar:** MPEF-Pb-2051 (PL2-589).

**Sample:** PL2-589 (MPEF-Pb-2051).

**Morphotype SA060** *Wilkinsoniophyllum menispermoides* Jud, Gandolfo, Iglesias, and Wilf, 2018 (Menispermaceae). Figures 33C-D, 34A-C.

**Morphotype exemplar:** MPEF-Pb-2052 (PL1-690) (holotype of *Wilkinsoniophyllum menispermoides*; Jud et al., 2018b, figure 4) Figures 33C-D, 34A-C.

**Additional referred specimen: PL1-** 1145.

**Morphotype SA061** (Araceae?) Figures 40G, 41H-K.

**Morphotype exemplar:** MPEF-Pb-3000 (PL2-129). Figures 40G, 41H-K. **Accessory exemplar:** MPEF-Pb-3001 (PL2-1123).

**Additional referred specimens: PL2-** 505, 588.

**Morphotype SA063.** Figures 33E, 34G-I.

**Morphotype exemplar:** MPEF-Pb-3002 (OR2-184). Figures 33E, 34G, 34I.

**Additional referred specimens: OR2-** 85, 86, 115, 175, 186, 188, 189 (MPEF-Pb-9124), 190, 191, 192, 193, 194, 195.

**Morphotype SA065** (Arecaceae). Figures 40D; 41F-G.

**Morphotype exemplar:** MPEF-Pb-3003 (OR2-149).

**Sample:** OR2-149 (MPEF-Pb-3003).

**Morphotype SA066.** Figures 33F, 34L-M.

**Morphotype exemplar:** MPEF-Pb-3004 (LF-79). Figures 33F, 34L-M. **Accessory exemplar:** MPEF-Pb-3005 (LF-40).

**Samples:** MPEF-Pb-3004, MPEF-Pb-3005.

**Morphotype SA067.** Figures 33G, 34D-F.

**Morphotype exemplar:** MPEF-Pb-3006 (OR2-178).

**Sample:** OR2-178 (MPEF-Pb-3006).

**Morphotype SA068.** Figures 33J, 35G-K.

**Morphotype exemplar:** MPEF-Pb-3007 (LF6-387a, b). Figure 35J-K. **Accessory exemplars:** MPEF-Pb-3008 (LF5-36) Figures 33J, 35G-H, and MPEF-Pb-3009 (LF5-7a, b).

**Additional referred specimens:** **LF5-** 2, 35, 38, 44, 46, 69, 70 (MPEF-Pb-9859), 100, 102, 152. **LF6-** 1, 26 (MPEF-Pb-9870), 70, 132, 149, 182, 229, 248, 285, 285, 288, 295 (MPEF-Pb-9128), 311, 337, 342, 351, 363, 378, 384, 416, 483, 488, 494, 502, 505, 509, 517, 530, 540, 550, 586, 596.

**Morphotype SA069** (Rhamnaceae ?) Figures 33H-I, 34J-K.

**Morphotype exemplar:** MPEF-Pb-3010 (LF5-23).

**Sample:** LF5-23 (MPEF-Pb-3010).

**Morphotype SA070** (Juglandaceae) Figures 35A-F, 39A-B.

**Morphotype exemplar:** MPEF-Pb-3011 (LF5-45). Figure 35C. **Accessory exemplar:** MPEF-Pb-3012 (LF5-19). Figures 35A, 39A-B.

**Additional referred specimens:** **LF5-** 1 (MPEF-Pb-9125), 12, 16. **LF6-** 18, 50, 216 (MPEF-Pb-6549), 222, 233, 256, 343, 356, 368 (MPEF-Pb-9127), 374 (MPEF-Pb-9875), 381 (MPEF-Pb-9126), 382, 397, 444, 500, 571, 588.

**Morphotype SA072** (Arecaceae) Figures 40F, 41D-E.

**Morphotype exemplar:** MPEF-Pb-3013 (CP-1). Figure 41D. **Accessory exemplar:** MPEF-Pb-3014 (CP-3). Figure 41E.

**Additional referred specimens:** **CP-** 2 (MPEF-Pb-4155), 4 (MPEF-Pb-4154).

**Morphotype SA073.** Figures 36A-E, 39E.

**Morphotype exemplar:** MPEF-Pb-3031 (LF6-338 a,b). Figure 36B. **Accessory exemplar:** MPEF-Pb-3032 (LF6-158). Figure 36E.

**Additional referred specimens: LF6-** 12, 17, 25, 29 (MPEF-Pb-9130), 33, 34, 35, 41, 43, 54, 56, 57 (MPEF-Pb-9864), 66, 67, 69, 80, 87, 100, 119, 126, 130, 140, 142, 146, 148, 170 (MPEF-Pb-9131), 173, 179, 180, 200, 209, 210, 213, 221, 226, 227, 232, 234, 234, 240, 243, 280 (MPEF-Pb-9846), 283, 308, 309, 310, 313, 314, 317, 320, 320, 329, 330, 333, 334, 335, 373, 379, 382, 383, 388, 392, 400, 405, 408, 410, 415, 417, 423, 425 (MPEF-Pb-9857), 429, 430, 434, 436, 437, 448, 455, 465, 471, 482, 484, 489, 492, 497, 506, 508, 511, 513, 513, 518, 521, 524, 532, 536, 543, 545, 562, 569, 569, 572, 577, 589, 598, 606 (MPEF-Pb-9143), 623, 626 (MPEF-Pb-9129).

**Morphotype SA074.** Figures 36F-H, 39F-G.

**Morphotype exemplar:** MPEF-Pb-3015 (LF6-457) Figures 36F, 36H, 39F-G.

**Additional referred specimens: LF6-** 3 (MPEF-Pb-9844), 138, 191, 238, 252, 633 (MPEF-Pb-9132).

**Morphotype SA075.** Figures 37E-H, 39C-D.

**Morphotype exemplar:** MPEF-Pb-3016 (LF6-190 a,b). Figures 37E, 39C.

**Additional referred specimens: LF5-** 86. **LF6-** 9, 11, 14, 16 (MPEF-Pb-9739), 23, 42, 68 (MPEF-Pb-9845), 104, 120, 125, 157, 174, 194 (MPEF-Pb-9137), 195, 201, 211, 237, 246, 260, 288, 296, 300, 300, 305 (MPEF-Pb-9876), 352 (MPEF-Pb-9134), 360, 390, 395, 418, 442, 519 (MPEF-Pb-9133), 529 (MPEF-Pb-9138), 548, 587, 596, 597, 616.

**Morphotype SA076.** Figures 37A-D, 40A-B.

**Morphotype exemplar:** MPEF-PB-3017 (LF6-223a, b) Figures 37A-B, 40A.

**Additional referred specimens: LF-06** 352 (MPEF-PB-9136), 515 (MPEF-PB-9135), 593, 595 (MPEF-PB-9153).

**Morphotype SA077.** Figures 38A-D, 40C.

**Morphotype exemplar:** MPEF-PB-3018 (LF6-165 a,b). Figures 38A, 38D, 40C.

**Additional referred specimens: PL2-**560. **LF-06** 5, 83, 206 (MPEF-Pb-9860), 214 (MPEF-PB-9140), 307, 445, 557 (MPEF-PB-9141), 567, 599.

**Morphotype SA078.** Figures 38E-H, 40E.

**Morphotype exemplar:** MPEF-PB-3019 (LF6-404 a,b). Figures 38E-F, 40E.

**Additional referred specimens: LF-06** 322 (MPEF-PB-9142), 629.