

Appendix I: Comparison of grasses recorded by dedicated grass checklist projects in Isalo NP (this study) and in Itremo (Nanjarisoa et al. 2017). (Taxa marked in pink are unique to Isalo massif, and those in green to Itremo)

Subfamilies	Tribes	Genera	Species	Locality
Ehrhartoideae	Phyllorachideae	<i>Humbertochloa</i>	<i>Humbertochloa bambusiuscula</i>	Isalo
Panicoideae	Centothecaeae	<i>Megastachya</i>	<i>Megastachya mucronata</i>	Isalo
Chloridoideae	Triraphideae	<i>Neyraudia</i>	<i>Neyraudia arundinacea</i>	Isalo
Panicoideae	Paniceae	<i>Cyrtococcum</i>	<i>Cyrtococcum multinode</i>	Isalo
Chloridoideae	Cynodonteae	<i>Dactyloctenium</i>	<i>Dactyloctenium aegyptium</i>	Isalo
Panicoideae	Paniceae	<i>Echinochloa</i>	<i>Echinochloa colona</i>	Isalo
Chloridoideae	Cynodonteae	<i>Enteropogon</i>	<i>Enteropogon prieurii</i>	Isalo
Chloridoideae	Cynodonteae	<i>Neostapfiella</i>	<i>Neostapfiella perrieri</i>	Isalo
Chloridoideae	Eragrostideae	<i>Pogonarthria</i>	<i>Pogonarthria squarrosa</i>	Isalo
Panicoideae	Paniceae	<i>Pseudechinolaena</i>	<i>Pseudechinolaena perrieri</i>	Isalo
Panicoideae	Paniceae	<i>Pseudechinolaena</i>	<i>Pseudechinolaena polystachya</i>	Isalo
Panicoideae	Paniceae	<i>Pseudolasiacis</i>	<i>Pseudolasiacis neoperrieri</i>	Isalo
Panicoideae	Andropogoneae	<i>Rottboellia</i>	<i>Rottboellia cochinchinensis</i>	Isalo
Aristidoideae	Aristideae	<i>Sartidia</i>	<i>Sartidia isaloensis</i>	Isalo
Panicoideae	Paniceae	<i>Trichantheium</i>	<i>Trichantheium parvifolium</i>	Isalo
Panicoideae	Paniceae	<i>Tricholaena</i>	<i>Tricholaena monachne</i>	Isalo
Pooideae	Poeae	<i>Agrostis</i>	<i>Agrostis elliotii</i>	Itremo
Bambusoideae	Arundinarieae	<i>Arundinaria</i>	<i>Arundinaria ibityensis</i>	Itremo
Bambusoideae	Arundinarieae	<i>Arundinaria</i>	<i>Arundinaria</i> sp.	Itremo
Pooideae	Brachypodieae	<i>Brachypodium</i>	<i>Brachypodium madagascariense</i>	Itremo
Pooideae	Poeae	<i>Calamagrostis</i>	<i>Calamagrostis emirnisensis</i>	Itremo
Pooideae	Poeae	<i>Festuca</i>	<i>Festuca camusiana</i>	Itremo
Pooideae	Poeae	<i>Pseudobromus</i>	<i>Pseudobromus breviligulatus</i>	Itremo
Panicoideae	Paniceae	<i>Alloteropsis</i>	<i>Alloteropsis semialata</i>	Itremo

Subfamilies	Tribes	Genera	Species	Locality
Chloridoideae	Cynodonteae	<i>Ctenium</i>	<i>Ctenium concinnum</i>	Itremo
Panicoideae	Andropogoneae	<i>Elionurus</i>	<i>Elionurus tristis</i>	Itremo
Panicoideae	Andropogoneae	<i>Eulalia</i>	<i>Eulalia villosa</i>	Itremo
Bambusoideae	Bambuseae	<i>Hickelia</i>	<i>Hickelia madagascariensis</i>	Itremo
Panicoideae	Paniceae	<i>Thuarea</i>	<i>Thuarea perrieri</i>	Itremo
Panicoideae	Paniceae	<i>Acroceras</i>	<i>Acroceras</i> cf.	Itremo
Panicoideae	Paniceae	<i>Acroceras</i>	<i>Acroceras boivinii</i>	Isalo
Panicoideae	Paniceae	<i>Acroceras</i>	<i>Acroceras seyrigii</i>	Isalo
Panicoideae	Paniceae	<i>Adenochloa</i>	<i>Adenochloa hymeniocloa</i>	Isalo
Panicoideae	Andropogoneae	<i>Andropogon</i>	<i>Andropogon eucomus</i>	Itremo & Isalo
Panicoideae	Andropogoneae	<i>Andropogon</i>	<i>Andropogon eucomus</i> subsp. <i>eucomus</i>	Isalo
Panicoideae	Andropogoneae	<i>Andropogon</i>	<i>Andropogon eucomus</i> subsp. <i>huilensis</i>	Isalo
Panicoideae	Andropogoneae	<i>Andropogon</i>	<i>Andropogon ibityensis</i>	Itremo & Isalo
Panicoideae	Andropogoneae	<i>Andropogon</i>	<i>Andropogon itremoensis</i>	Itremo
Panicoideae	Andropogoneae	<i>Andropogon</i>	<i>Andropogon ivohibensis</i>	Itremo & Isalo
Aristidoideae	Aristideae	<i>Aristida</i>	<i>Aristida barbicollis</i>	Isalo
Aristidoideae	Aristideae	<i>Aristida</i>	<i>Aristida congesta</i>	Isalo
Aristidoideae	Aristideae	<i>Aristida</i>	<i>Aristida cumingiana</i>	Isalo
Aristidoideae	Aristideae	<i>Aristida</i>	<i>Aristida rufescens</i>	Isalo
Aristidoideae	Aristideae	<i>Aristida</i>	<i>Aristida similis</i>	Itremo & Isalo
Aristidoideae	Aristideae	<i>Aristida</i>	<i>Aristida tenuissima</i>	Itremo
Panicoideae	Andropogoneae	<i>Arundinella</i>	<i>Arundinella nepalensis</i>	Itremo
Panicoideae	Paspaleae	<i>Axonopus</i>	<i>Axonopus compressus</i>	Itremo & Isalo
Bambusoideae	Bambuseae	<i>Bamboo</i>	<i>Bamboo</i>	Isalo
Panicoideae	Andropogoneae	<i>Bothriochloa</i>	<i>Bothriochloa bladhii</i>	Itremo & Isalo
Panicoideae	Paniceae	<i>Urochloa</i>	<i>Urochloa arrecta</i>	Itremo & Isalo
Panicoideae	Paniceae	<i>Brachiaria</i>	<i>Brachiaria bemarivensis</i>	Itremo & Isalo

Subfamilies	Tribes	Genera	Species	Locality
Panicoideae	Paniceae	<i>Brachiaria</i>	<i>Brachiaria comorensis</i>	Isalo
Panicoideae	Paniceae	<i>Brachiaria</i>	<i>Brachiaria epacridifolia</i>	Itremo
Panicoideae	Paniceae	<i>Brachiaria</i>	<i>Brachiaria nana</i>	Isalo
Panicoideae	Paniceae	<i>Brachiaria</i>	<i>Brachiaria umbellata</i>	Itremo
Panicoideae	Paniceae	<i>Cenchrus</i>	<i>Cenchrus echinatus</i>	Isalo
Panicoideae	Paniceae	<i>Cenchrus</i>	<i>Cenchrus polystachios</i>	Itremo & Isalo
Panicoideae	Paniceae	<i>Cenchrus</i>	<i>Cenchrus purpureus</i>	Isalo
Chloridoideae	Cynodonteae	<i>Chloris</i>	<i>Chloris pycnothrix</i>	Itremo & Isalo
Chloridoideae	Cynodonteae	<i>Chloris</i>	<i>Chloris virgata</i>	Isalo
Panicoideae	Andropogoneae	<i>Chrysopogon</i>	<i>Chrysopogon serrulatus</i>	Itremo & Isalo
Micrairoideae	Isachnae	<i>Coelachne</i>	<i>Coelachne africana</i>	Itremo & Isalo
Chloridoideae	Cynodonteae	<i>Craspedorhachis</i>	<i>Craspedorhachis africana</i>	Itremo & Isalo
Panicoideae	Andropogoneae	<i>Cymbopogon</i>	<i>Cymbopogon caesius</i>	Itremo & Isalo
Chloridoideae	Cynodonteae	<i>Cynodon</i>	<i>Cynodon dactylon</i>	Itremo & Isalo
Panicoideae	Paniceae	<i>Cyrtococcum</i>	<i>Cyrtococcum deltoideum</i>	Itremo & Isalo
Panicoideae	Paniceae	<i>Digitaria</i>	<i>Digitaria bicornis</i>	Isalo
Panicoideae	Paniceae	<i>Digitaria</i>	<i>Digitaria ciliaris</i>	Itremo & Isalo
Panicoideae	Paniceae	<i>Digitaria</i>	<i>Digitaria debilis</i>	Isalo
Panicoideae	Paniceae	<i>Digitaria</i>	<i>Digitaria longiflora</i>	Itremo & Isalo
Panicoideae	Paniceae	<i>Digitaria</i>	<i>Digitaria nuda.</i>	Isalo
Panicoideae	Paniceae	<i>Digitaria</i>	<i>Digitaria pseudodiagonalis</i>	Itremo & Isalo
Panicoideae	Paniceae	<i>Digitaria</i>	<i>Digitaria violascens</i>	Isalo
Chloridoideae	Cynodonteae	<i>Eleusine</i>	<i>Eleusine indica</i>	Itremo & Isalo
Chloridoideae	Eragrostideae	<i>Eragrostis</i>	<i>Eragrostis aspera</i>	Itremo & Isalo
Chloridoideae	Eragrostideae	<i>Eragrostis</i>	<i>Eragrostis atrovirens</i>	Itremo & Isalo
Chloridoideae	Eragrostideae	<i>Eragrostis</i>	<i>Eragrostis betsileensis</i>	Itremo
Chloridoideae	Eragrostideae	<i>Eragrostis</i>	<i>Eragrostis capensis</i>	Itremo

Subfamilies	Tribes	Genera	Species	Locality
Chloridoideae	Eragrostideae	<i>Eragrostis</i>	<i>Eragrostis chapelieri</i>	Isalo
Chloridoideae	Eragrostideae	<i>Eragrostis</i>	<i>Eragrostis cilianensis</i>	Isalo
Chloridoideae	Eragrostideae	<i>Eragrostis</i>	<i>Eragrostis cylindriflora</i>	Isalo
Chloridoideae	Eragrostideae	<i>Eragrostis</i>	<i>Eragrostis hildebrandtii</i>	Itremo
Chloridoideae	Eragrostideae	<i>Eragrostis</i>	<i>Eragrostis japonica</i>	Itremo & Isalo
Chloridoideae	Eragrostideae	<i>Eragrostis</i>	<i>Eragrostis lateritica</i>	Itremo
Chloridoideae	Eragrostideae	<i>Eragrostis</i>	<i>Eragrostis patula</i>	Itremo
Chloridoideae	Eragrostideae	<i>Eragrostis</i>	<i>Eragrostis tenella</i>	Itremo & Isalo
Panicoideae	Paniceae	<i>Eriochloa</i>	<i>Eriochloa fatmensis</i>	Itremo
Panicoideae	Andropogoneae	<i>Heteropogon</i>	<i>Heteropogon contortus</i>	Itremo & Isalo
Panicoideae	Andropogoneae	<i>Heteropogon</i>	<i>Heteropogon melanocarpus</i>	Itremo
Panicoideae	Andropogoneae	<i>Hyparrhenia</i>	<i>Hyparrhenia newtonii</i>	Itremo & Isalo
Panicoideae	Andropogoneae	<i>Hyparrhenia</i>	<i>Hyparrhenia rufa</i>	Itremo & Isalo
Panicoideae	Andropogoneae	<i>Hyparrhenia</i>	<i>Hyparrhenia schimperi</i>	Itremo
Panicoideae	Andropogoneae	<i>Hyperthelia</i>	<i>Hyperthelia dissoluta</i>	Isalo
Panicoideae	Andropogoneae	<i>Imperata</i>	<i>Imperata cylindrica</i>	Itremo & Isalo
Micrairoideae	Isachnae	<i>Isachne</i>	<i>Isachne mauritiana</i>	Itremo & Isalo
Panicoideae	Andropogoneae	<i>Ischaemum</i>	<i>Ischaemum koleostachys</i>	Isalo
Panicoideae	Andropogoneae	<i>Ischaemum</i>	<i>Ischaemum polystachyum</i>	Itremo & Isalo
Panicoideae	Andropogoneae	<i>Ischaemum</i>	<i>Ischaemum rugosum</i>	Itremo
Ehrhartoideae	Ehrharteae	<i>Leersia</i>	<i>Leersia hexandra</i>	Itremo & Isalo
Panicoideae	Tristachyideae	<i>Loudetia</i>	<i>Loudetia filifolia</i>	Isalo
Panicoideae	Tristachyideae	<i>Loudetia</i>	<i>Loudetia simplex</i>	Itremo & Isalo
Panicoideae	Paniceae	<i>Melinis</i>	<i>Melinis minutiflora</i>	Itremo & Isalo
Panicoideae	Paniceae	<i>Melinis</i>	<i>Melinis repens</i>	Itremo & Isalo
Chloridoideae	Cynodonteae	<i>Microchloa</i>	<i>Microchloa kunthii</i>	Itremo & Isalo
Panicoideae	Paniceae	<i>Oplismenus</i>	<i>Oplismenus burmanni</i>	Itremo & Isalo

Subfamilies	Tribes	Genera	Species	Locality
Panicoideae	Paniceae	<i>Oplismenus</i>	<i>Oplismenus compositus</i>	Itremo & Isalo
Panicoideae	Paniceae	<i>Oplismenus</i>	<i>Oplismenus flavicomus</i>	Itremo
Panicoideae	Paniceae	<i>Oplismenus</i>	<i>Oplismenus hirtellus</i>	Itremo & Isalo
Panicoideae	Paniceae	<i>Panicum</i>	<i>Panicum ambositrense</i>	Itremo
Panicoideae	Paniceae	<i>Panicum</i>	<i>Panicum andringitrense</i>	Isalo
Panicoideae	Paniceae	<i>Panicum</i>	<i>Panicum brazzavillense</i>	Itremo
Panicoideae	Paniceae	<i>Panicum</i>	<i>Panicum brevifolium</i>	Itremo & Isalo
Panicoideae	Paniceae	<i>Panicum</i>	<i>Panicum cinctum</i>	Itremo & Isalo
Panicoideae	Paniceae	<i>Panicum</i>	<i>Panicum hymenochilum</i>	Itremo
Panicoideae	Paniceae	<i>Panicum</i>	<i>Panicum ibitense</i>	Itremo & Isalo
Panicoideae	Paniceae	<i>Panicum</i>	<i>Panicum luridum</i>	Itremo
Panicoideae	Paniceae	<i>Panicum</i>	<i>Panicum mitopus</i>	Itremo & Isalo
Panicoideae	Paniceae	<i>Panicum</i>	<i>Panicum novemnerve</i>	Isalo
Panicoideae	Paniceae	<i>Panicum</i>	<i>Panicum perrieri</i>	Itremo
Panicoideae	Paniceae	<i>Panicum</i>	<i>Panicum subalbidum</i>	Isalo
Panicoideae	Paniceae	<i>Panicum</i>	<i>Panicum subhystrix</i>	Itremo
Panicoideae	Paniceae	<i>Panicum</i>	<i>Panicum voeltzkowii</i>	Isalo
Panicoideae	Paspaleae	<i>Paspalum</i>	<i>Paspalum scrobiculatum</i>	Itremo & Isalo
Chloridoideae	Cynodonteae	<i>Perotis</i>	<i>Perotis patens</i>	Itremo & Isalo
Arundinoideae	Molineae	<i>Phragmites</i>	<i>Phragmites mauritianus</i>	Itremo & Isalo
Panicoideae	Andropogoneae	<i>Saccharum</i>	<i>Saccharum hildebrandtii</i>	Itremo
Panicoideae	Andropogoneae	<i>Saccharum</i>	<i>Saccharum perrieri</i>	Itremo
Panicoideae	Paniceae	<i>Sacciolepis</i>	<i>Sacciolepis africana</i>	Isalo
Panicoideae	Paniceae	<i>Sacciolepis</i>	<i>Sacciolepis curvata</i>	Isalo
Panicoideae	Paniceae	<i>Sacciolepis</i>	<i>Sacciolepis indica</i>	Itremo
Panicoideae	Paniceae	<i>Sacciolepis</i>	<i>Sacciolepis viguieri</i>	Itremo
Panicoideae	Andropogoneae	<i>Schizachyrium</i>	<i>Schizachyrium brevifolium</i>	Itremo & Isalo

Subfamilies	Tribes	Genera	Species	Locality
Panicoideae	Andropogoneae	<i>Schizachyrium</i>	<i>Schizachyrium sanguineum</i>	Itremo & Isalo
Panicoideae	Paniceae	<i>Setaria</i>	<i>Setaria bathiei</i>	Itremo
Panicoideae	Paniceae	<i>Setaria</i>	<i>Setaria madecassa</i>	Isalo
Panicoideae	Paniceae	<i>Setaria</i>	<i>Setaria pumila</i>	Itremo & Isalo
Panicoideae	Paniceae	<i>Setaria</i>	<i>Setaria scottii</i>	Itremo
Panicoideae	Paniceae	<i>Setaria</i>	<i>Setaria sphacelata</i>	Itremo & Isalo
Panicoideae	Paniceae	<i>Setaria</i>	<i>Setaria vatkeana</i>	Isalo
Chloridoideae	Zoyiseae	<i>Sporobolus</i>	<i>Sporobolus centrifugus</i>	Itremo & Isalo
Chloridoideae	Zoyiseae	<i>Sporobolus</i>	<i>Sporobolus festivus</i>	Isalo
Chloridoideae	Zoyiseae	<i>Sporobolus</i>	<i>Sporobolus paniculatus</i>	Itremo & Isalo
Chloridoideae	Zoyiseae	<i>Sporobolus</i>	<i>Sporobolus pilifer</i>	Itremo & Isalo
Chloridoideae	Zoyiseae	<i>Sporobolus</i>	<i>Sporobolus pyramidalis</i>	Itremo & Isalo
Chloridoideae	Zoyiseae	<i>Sporobolus</i>	<i>Sporobolus subulatus</i>	Isalo
Panicoideae	Paniceae	<i>Stenotaphrum</i>	<i>Stenotaphrum unilaterale</i>	Itremo
Arundinoideae	Molineae	<i>Stypeiochloa</i>	<i>Stypeiochloa hitchcockii</i>	Itremo
Arundinoideae	Molineae	<i>Stypeiochloa</i>	<i>Stypeiochloa</i> sp.	Isalo
Panicoideae	Andropogoneae	<i>Trachypogon</i>	<i>Trachypogon spicatus</i>	Itremo & Isalo
Panicoideae	Tristachyideae	<i>Trichopteryx</i>	<i>Trichopteryx dregeana</i>	Itremo & Isalo
Panicoideae	Tristachyideae	<i>Tristachya</i>	<i>Tristachya (Isalus isalensis)</i>	Isalo
Panicoideae	Tristachyideae	<i>Tristachya</i>	<i>Tristachya betsileensis</i>	Itremo
Panicoideae	Tristachyideae	<i>Tristachya</i>	<i>Tristachya humbertii</i>	Isalo
Panicoideae	Andropogoneae	<i>Urelytrum</i>	<i>Urelytrum agropyroides</i>	Itremo & Isalo
Panicoideae	Paniceae	<i>Urochloa</i>	<i>Urochloa arrecta</i>	Itremo & Isalo
Panicoideae	Paniceae	<i>Urochloa</i>	<i>Urochloa deflexa</i>	Isalo & Itremo
Panicoideae	Paniceae	<i>Urochloa</i>	<i>Urochloa maxima</i>	Isalo & Itremo

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Appendix II: The numbers of grass subfamilies, tribes, genera, and species found in Itremo and in Isalo protected areas and listed in Appendix I, followed by the number present in both areas. (Jaccard (Sj) similarity indexes were calculated as follows:  $c/(a + b - c)$  with a = Total for Isalo, b = Total for Itremo, c = Shared species)

	Subfamilies	Tribes	Genera	Species
Total for Isalo (a)	7	16	58	112
Total for Itremo (b)	8	17	56	99
Shared between Isalo and Itremo (c)	7	13	43	56
Sj	0.88	0.65	0.601	0.36
Sj (%)	88	65	61	36