APPENDICES

Appendix 1. Species of orchids selected for modelling, their distribution in departments in Colombia, altitudes and notes on their ecology.

Species	Distribution	Supplemental notes
Brassavola nodosa (L.) Lindl.	Neotropical; (Bol, Col, CR, Ecu, Guy, Mex, Per) Col: (Ant, San, Bol, Cal, Ces, Cor, Cho, Cun, Gua, Mag, San, Suc, Tol) 5-950 m.	Rounded and succulent leaves to store water and prevent dessication. Grows in open areas exposed to light. Grows in dry forests and sub-xerophytic shrubland. Phorophytes: *Caesalpinia punctata, Caesalpinia tortuosa, Pereskia guamacho, Samanea saman, Crescentia cujete* and *Anacardium excelsum*.
Catasetum tabulare Lindl.	Endemic; (Col) 200-1350 m. Col: (Ant, Ris, VdC, Tol, Suc)	Equipped with pseudobulbs up to 25 cm in length to store water. Prefers perimeter areas of dry forest and riverine forests with medium brightness. It has been observed in living fences and at the perimeters of abandoned coffee plantations, as well as in groups of trees outside the forest but sheltered from the wind. It grows on *Gliricidia sepium, Senna spectabilis, Anacardium excelsum, Machaerium capote* and *Brosimum alicastrum*.
Cyrtopodium paniculatum (Ruiz & Pav.) Garay	Neotropical; (Bol, Col, CR, Ecu, Guy, Mex, Per) Col: (Ant, Cor, Bol, Cau, Ces, Cun, Mag, Hui, San, Suc Vch, VdC) 5-1200 m.	Equipped with pseudobulbs up to 60 cm in length to store water. Grows in dry forest and sub-xerophytic dry shrubland and as a terrestrial plant in outcrops of sedimentary rocks in foothill areas with frequent wildfire, despite which this species persists. As an epiphyte, it has been observed on *Anacardium excelsum*, *Sterculia apetala* and *Elaeis guineensis*.
Dimerandra emarginata (G. Mey.) Hoehne	Neotropical; (Bel, Bra, CR, Ecu, Sal, GFr, Gua, Guy, Hnd, Mex, Nic, Pan, Per, Sur, Ven) Col: (Ant, Ara, Bol, Cal, Cas, Cau, Ces, Cun, Gua, Mag, Met Qui, Ris, San, VdC) 100-1400 m.	Possesses elongated pseudobulbs up to 40 cm in length. It grows in lowlands and Andean foothills and is present in dry forests, sub-xerophytic shrubland and seasonally flooded forests, including wooded pasture. Populations present in the Cauca River Valley occupy the altitudinal ceiling of the continent. It has been observed on *Anacardium excelsum, Erythroxylum ulei, Ficus insipida, Xylopia ligustrifolia, Laetia americana* and *Oreopanax cecropifolius*.
Epidendrum rigidum Jacq.	Neotropical; (Arg, Bel, Bol, Bra, Bhm, Cub, Rdm, Jam, PR, Tri, Col, CR, Ecu, Gua, Guy, Hnd, Mex, Nic, Pan, Per, Sur, Ven) Col: (Ant, Boy, Cal, Cau, Cun, Hui, Nsa, Mag, Ris, San, Qui, VdC) 600 -1355 m.	Has waxy cuticle as an adaptation to the conditions of water stress. Grows in dry forest, seasonally flooded forests, riverine forests and forest-pasture perimeters in areas of high and medium brightness. It has been observed on *Anacardium excelsum, Laetia americana, Luehea seemannii, Guarea guidonia, Erythroxylum ulei, Guarea kunthiana, Chlorophora tinctoria* and *Ficus obtusifolia*.
Jacquiniella globosa (Jacq.) Schltr.	Neotropical; (Bel, Bol, Bra, Col, CR, Cub, Ecu, GFr, Gua, Guy, Hnd, Jam, Mar, Mex, Nic, Pan, Per, PR, RD, Sal, Sur, T&T, Ven) Col: (Ant, Cho, Cau, Cun, Gua, Hui, Mag, Met, Qui, Ris, San, VdC) 700-1600 m.	Small epiphyte with rounded leaves and thick cuticle. Grows in riparian forests, sub-xerophytic shrubland and seasonally flooded forests. Establishes both on the exterior branches of shrubs a few metres from the ground and in treetops more than 30 metres high. It has been observed on Ficus insipida, *Lonchocarpus* sp., *Anacardium excelsum*, *Neea divaricata*, *Clusia minor, Zanthoxylum fagara* and *Clusia fructiangusta*.
Oeceoclades maculata (Lindl.) Lindl.	Subcosmopolitan; (Arg, Bol, Bra, R. Dom, Jam, PR, Col, Com, CR, Ecu, El Salv, Gua, Guy, Hnd, Mex, Pan, Par, Per, Sur, Tan, Ven) Col: (Ant, Bol, Cal, Cas, Cau, Ces, Cor, Cun, Mag, Nsa, VdC, Ris, San, Suc, Tol.) 20-1150 m.	Only terrestrial species, occasional epiphyte. Possesses underground succulent pseudobulbs for water storage. Extensive global distribution occurring in both the Paleotropics and Neotropics. Grows in dry forests dominated by *Anacardium excelsum, Sabal mauritiiformis, Syagrus sancona* and *Attalea butyracea* in transition areas between pasture and riparian forest. This adaptation to different ombro climates has enabled its colonization to different environments around the world.
Polystachya foliosa (Hook.) Rchb. f.	Neotropical; (Arg, Bel, Bol, Bra, Cub, Rdm, Jam, PR, Col, CR, Ecu, Sal, Gua, Guy, Hnd, Mex, Nic, Pan, Par, Per, Sur, Ven) Col: (Ant, Ara, Boy, Cal, Cas, Cau, Cun, Guaj, Mag, Met, Nsa, Qui, Ris, San, VdC, Vich) 50 -1400 m.	Possesses small oval pseudobulbs to store water. Grows at perimeters of riverine forests and seasonally flooded forests. More abundant below 500 m. It has been observed on *Laetia americana, Guarea guidonia, Vitex orinocensis, Inga spectabilis* and *Miconia* sp.

Appendix 1 (*continues*).

Species	Distribution	Supplemental notes
Scaphyglottis prolifera (R. Br.) Cogn.	Neotropical; (Bel, Bol, Col, CR, Ecu, Gua, Guy, Hnd, Jam, Mex, Nic, Pan, Per, Tri, Ven). Col: (Ant, Cau, Cho, Cun, Gua, Hui, Mag, Met, Ris, San, VdC) 500-1600 m.	Possesses multiple elongated and plump pseudobulbs to prevent dessication. Grows in riparian forests, sub-xerophytic shrubland and forest perimeters or at the interior of forests with neighbouring areas of pasture. In localities with semi-arid climate, this plant finds refuge in the depressions of water channels where the microclimate is more humid. It has been observed on *Brosimum alicastrum, Matisia* sp., *Guarea guidonia, Anacardium excelsum, Guazuma ulmifolia, Amyris pinnata, Daphnopsis americana, Aegiphila grandis, Machaerium capote, Guarea guidonia, Hura crepitans, Erythroxylum ulei, Luehea seemannii, Laetia americana and Dendropanax colombianum.*
Trichocentrum carthagenense (Jacq.) M.W. Chase & N.H. Williams	Neotropical; (Bel, Col, CR., Gua, Hnd, Mex, Nic, Pan, Sal, Ven.) Col: (Ant, Ara, Bol, Boy, Cas, Cau, Cor, Cun, Gua, Hui, Mag, Met, Boy, Tol, Mag, San, Suc, VdC, Vic) 50-1200 m.	Waxy cuticle for adaptation to conditions of water stress. Grows in dry forest and in flooded and non-flooded habitats, sub-xerophytic shrubland, and riverine forests. Frequently epiphytic on trunks and stems a few metres from the ground and less often in matts of leaf litter and decaying trunks. It has been observed on *Eugenia bicolor, Anacardium excelsum, Citharexylum kunthianum, Eugenia monticola, Neea divaricata, Ardisia guianensis, Guazuma ulmifolia, Calliandra* sp., *Jacaranda obtusifolia, Maclura tinctoria* and *Machaerium capote.*
Trizeuxis falcata Lindl.	Neotropical; (Bol, Bra, Col, CR, Ecu, Pan, Per, Ven). Col (Ant, Ara, Boy, Caq, Cas, Cau, Cun, Met, Mag, VdC, Qui, Ris, San) 100-1500 m.	Small pseudobulbs and flattened leaves reduce the effect of the wind to minimise dessication. Frequent on fences, trunks, roadsides, and citrus trees and always found in environments of bright light and with a high level of recruitment. Rarely found at the interior of the forest. It has been observed on *Psidium guajava, Citrus* spp., *Crescentia cujete, Parathesis reticulata, Coffea arabica, Guapira costaricana* and *Eugenia* sp.
Vanilla calyculata Schltr.	Neotropical; (Col, Hnd, Mex, Sal) Col: (Hui, Mag, Nar, Tol, VdC) 570 -1200 m.	Possesses creeping habit and swollen stalks with greater capacity to store water and prevent desiccation. Grows in foothills of the Central Cordillera and Western Cordillera in dry and sub-xerophytic habitats, as well as in alluvial deposits of the inter-Andean valleys. It has been observed on *Cupania americana, Eugenia monticola* and *Psidium sartorianum.*

Country abbreviations: **Arg**: Argentina; **Bel**: Belize; **Bhm**: Bahamas; **Bol**: Bolivia; **Bra**: Brasil; **CR**: Costa Rica; **Col**: Colombia; **Cub**: Cuba; **Ecu**: Ecuador; **Gua**: Guatemala; **Guy**: Guyana; **GFr**: French Guyana; **Hat:** Haiti; **Hnd:** Honduras; **Jam**: Jamaica; **Mex**: Mexico; **Nic**: Nicaragua; **Pan**: Panama; **Per**: Peru; **RD**: Dominican Republic; **Sal**: El Salvador; **Sur**: Surinam; **T&T**: Trinidad& Tobago; **Urg**: Uruguay; **PR**: Puerto Rico; **Par**: Paraguay; **Ven:** Venezuela. Abbreviations of departments of Colombia: **Ama**: Amazonas; **Ant**: Antioquia; **Ara**: Arauca; **Atl**: Atlantic; **Bol:** Bolívar; **Boy:** Boyacá **Cal:** Caldas; **Caq**: Caquetá; **Cau**: Cauca; **Cas:** Casanare; **Ces**: Cesar; **Cho**: Chocó; **Cor**: Córdoba; **Cun**: Cundinamarca; **Guai**: Guainía; **Guav**: Guaviare; **Guaj**: La Guajira; **Hui**: Huila; **Mag**: Magdalena; **Met**: Meta; **Nar**: Nariño; **Nsa**: North of Santander; **Put**: Putumayo; **Qui**: Quindío; **Ris**: Risaralda; **San**: Santander; **Sap**: Sán Andrés and Providencia; **Suc**: Sucre; **Tol**: Tolima; **VdC**: Valle del Cauca; **Vau**: Vaupés; **Vich:** Vichada.

Appendix 2. Kappa value according to Monserud and Leemans (1992).

Kappa Value	Estimation
K <0.05	No agreement
0.05 ≤ K <0.20	Very poor
0.20 ≤ K <0.40	Poor
0.40 ≤ K <0.55	Medium
0.55 ≤ K <0.70	Good
0.70 ≤ K <0.85	Very good
0.85 ≤ K <0.99	Excellent
0.99 ≤ K ≤100	Perfect

Appendix 3. Variance Analysis of one factor.

Summary

Groups	*Count*	*Sum*	*Mean*	*Variance*
Presente	10213	10041305	983,1885832	54291,62268
2030a	3429	3996036	1165,364829	49544,98559
2050b	2237	3051427	1364,071077	38030,01239

Variance Analysis

Origin of variations	*Sum of squares*	*Degrees of freedom*	*Average of squares*	*F*	*P* Value *Probability*	Critical value for F
Between groups	300995377,6	2	150497688,8	2952,301082	0,0000	2,996297626
Within groups	809301369,1	15876	50976,40269			
Total	1110296747	15878				

Appendix 4. Highlights for adaptation to climate change in five Tropical Dry Forest (TDF) bioregions in Colombia.

Bioregion	Number of orchids	Spatiotemporal changes according to the model	IDEAM Prediction	Highlights
Cauca River Valley	70 species (Reina-Rodríguez *et al.* 2010)	Loss of suitability areas, especially north of the Department of Cauca, Cauca Valley, to Risaralda along the floodplain of the Cauca River; see Table 4. Compared to other bioregions, it loses the largest area of suitability and does so consistently in the two periods and = 13.3). These changes will be more pronounced in the short term = 3.4) than in the medium term = 2.3). The severity will be more pronounced in this last period with above average values (4.3); see Table 5. Suitability increased only in Antioquia for both the 2030 and 2050 periods, attributed to an increase of 9.3% in precipitation.	Temperature will increase by 2.4 degrees, and precipitation will only increase at the limits of the department of the Valle del Cauca and the department of Risaralda.	The northern area of this bioregion hosts the largest relicts of TDF and is where most of the orchid richness is maintained. The implementation of conservation action in the short and medium term is vital. The loss of suitability in areas of connectivity of the Dagua and Cauca basin, which is consistent in the two periods with $p \leq 20$, is of great concern, as seen in Figure 3. Attention-investment should be in design actions and implementation of AMC. AMC are high priority.
Caribbean Region	53 species at altitudes < 1000 m. (Betancur *et al.* 2015)	More than any other bioregion, suitability areas in the Caribbean region are especially low ($p \leq 20$) and marked on maps; see Figure 3. Suitability areas will be lost in both the 2030 and 2050 periods. Changes in this bioregion will be more pronounced in the short-term = 5.7) than medium-term = 1.5). Severity will be greater in the second period, with values greater than average > see Table 5.	10-30% less precipitation and an average annual temperature of 30°C are predicted.	The minimum values detected by the model for both periods (26,422 ha and 6907 ha) are critical values compared to other TDF areas in Colombia. For the 2050 period, suitable areas disappear in departments such as Córdoba, Sucre, Bolívar and Atlantic. Orchids present here will be more exposed to hydric and thermal stress, especially in the large flat areas without altitudinal gradients. Areas with strong slopes, cliffs and areas unsuitable for mechanized agriculture and urbanization become important (Macuira, Snia. Piojó, Montes de María, precoastal hills to Cartagena). Attention-investment in knowledge of orchid biodiversity and conservation activities is high priority.
Magdalena Valley	73 species in the Magdalena Valley (Bernal *et al.* 2015)	At the national level, this bioregion loses the second-most area of suitability after the Cauca River Valley; see Table 4. It is consistent in both periods and = 6.7), especially the departments of Huila and Cundinamarca in both periods. The department of Tolima will have minimum areas of regional suitability in both periods; see Table 1. Bioregional indices are above average = 3.7 and =4.1), but particularly notable is the medium-term value, which exceeds that of the other bioregions in Colombia, for which it is expected that the effect on biodiversity will be greater during this period; see Table 5.	Increases of 2.7°C in temperature, and between 20% and 30% in precipitation are expected, especially towards the southern part.	The Magdalena Valley has extensive flat areas, but unlike the Caribbean region, it has thermic/altitudinal gradients less than 50 km away. In this regard, the prospects for orchid conservation in the mid-basin of the Magdalena river are greater. The basins of the inner slopes of the Central and Eastern cordillera acquire great relevance for conservation. Attention-investment in knowledge of orchid biodiversity activities in the central and southern area of this bioregion is high priority. The design and implementation of AMC is a priority.
Patía Valley	< 30 species (Reina-Rodríguez *com pers.*)	Losses of suitable areas are expected in both periods. The indices calculated show values above average in both periods =3.8 and =3.4), also suggesting significant changes in size, with the greatest intensity in the short-term. The severity will be more pronounced than other areas of the country	Precipitation will increase 10-30%, and temperature will increase by up to 2.4°C.	The model detected minimum values in suitability areas for the two periods (26,422 has and 6907 has). The department of Cauca will lose the largest suitable area, and suitable areas would disappear from Nariño; see Table 4. The Patía Valley has thermic/altitudinal gradients at less than 50 km, which facilitate the design and establishment of AMC. During the field phase, areas with cliffs and concave rock formations up to 760 m. were observed, which contain TDF vegetation and where the flora and fauna found refuge against a warmer and more exposed environment. Other territories to the south have relief with steep slopes that form natural barriers on the inner slopes of the Central-Western Cordillera. Some of these areas have been proposed as climatic niches.

Appendix 4 (*continues*).

Bioregion	Number of orchids	Spatiotemporal changes according to the model	IDEAM Prediction	Highlights
Santander Region	127 species (Martínez *et al.* 2015)	Loss of areas of suitability is expected for both periods. The severity index for the 2050 period has the highest value of the country =10.5). Therefore, stronger and higher changes than any other TDF area are expected (see Figure 4). The minimum value of 13,210 ha for the 2050 period along with the Patía Valley and the Caribbean region is one of the lowest for this period	Thermic increases of 2.7°C and hydric decreases of 10% to 40% are predicted for the end of the century, which could affect the ecosystem simultaneously.	The Santander territory, as well as other areas, has large steep areas on the western slope of the Eastern Cordillera that connect the Andes with altitudinal gradients from the Magdalena River to areas of páramo (100-3400 m.a.s.l.). It is the only bioregion with large TDF areas located in mid-mountain areas, a factor that could facilitate migration routes more quickly in this bioregion than in other areas. Attention-investment in in the design and implementation of AMC is high-priority.

Appendix 5. Location of bioclimatic niches in Colombia for adaptation-conservation. Based on the modelling of Tropical Dry Forest (TDF) orchids for 2050 under Climate change scenario. In **bold** are complementary areas with p<0.61. Abbreviations: PA = Public proctected areas; NRCS = Natural Reserves of Civil Society (private protected areas); S.N.S.M= Sierra Nevada de Santa Marta

Id.	Bioregion	Basin (s) and/or Areas with	Mountainous System/ Cordillera	Slope	Municipalities	(a) Areas with net suitability $p > 0.61$ (ha)	(b) Areas of TDF < 23 km (ha)	(c) Areas of PA < 23 km (ha)	(d) Areas of NRCS < 23 km (ha)	Altitudinal range (a-b); (a-c); (a-d)	% of suitable area in the basin	Environmental authority
1	Cauca River Valley	Direct to Cauca	Western C.	East-West	Medellin, Ebéjico, San Jerónimo, Heliconia	50074	22988	10308	82	460-1791	2.04	CVC-CRC
2		Amaime	Central C.	West	El Cerrito, Palmira	4398				1026-1775	5.53	CVC
3		Anchicayá	Western C.	East	Buenaventura, Dagua			23765		629-1789		CVC
4		Bugalagrande	Central C.	West	Bugalagrande, Andalucía, Tuluá	3386	370			1017-1128	4.93	CVC
5		Cajambre	Western C.	East	Buenaventura			2201		1131-1692	5.62	CVC
6		Calima	Western C.	East	Calima, Restrepo, Yotoco	8864	119		141	1544-1619	12.60	CVC
7		Cuenca	Western C.	East	Buenaventura			20164		697-1771	0.17	CVC
8		Dagua	Western C.	East	Dagua, Restrepo, Yotoco, Vijes, Calima	16234	2179	15015	343	649-1796	6.36	CVC
9		De Las Vueltas	Western C.	East	El Cairo, Versalles, El Dovio, Bolívar	7284	417		298	1096-1466	2.29	CVC-CODECHOCO
10		Fraile	Central C.	West	Palmira, Florida, Pradera	1537	41	608		948-1752	1.76	CVC
11		Garrapatas	Western C.	East	Bolívar, Trujillo	1249	395			920-1254	2.73	CVC

12		Ovejas	Central C.	West	Caldono, Piendamó	1284				1521-1570	1.10	CVC-CRC
13		Paila	Central C.	West	Miranda, Corinto, Florida	1341				1248-1576	4.66	CVC
14		Porce	Western C.	North	Itaguí, Medellín, Sabaneta	13480		507		1472-1791	0.07	CORANTIOQUIA
15		Sipi (Garrapatas)	Western C.	East	El Dovio	81	656		11	804-1140	5.34	CVC
16		Tuluá	Central C.	West	Andalucía, Tuluá, San Pedro	6044	946		70	958-1374	0.05	CVC
17	Caribbean Region	Ariguaní	S.N.S.M.	West	Pueblo bello	880	1808			249-846	0.22	CORPOMAG
18		Badillo	S.N.S.M.	East	Valledupar	168	8138			147-992	0.27	CORPOCESAR
19		Catatumbo	Eastern C.	East	Río de Oro	169	1717			1214-1485	0.48	CORPONOR
20		Cesar	S.N.S.M.	East	Manaure balcón del Cesar, Valledupar	502	33048		373	118-1337	0.07	CORPOCESAR
21		Cesarito	S.N.S.M.	East	Pueblo bello, Valledupar	314				782-1095	0.26	CORPOCESAR
22		Dilubio	S.N.S.M.	East	Valledupar		82			507-736		CORPOCESAR
23		Direct to Magdalena	Central C.	North	Río de Oro	169	5475			83-829	0.17	RACDIQUE
24		Direct to Caribe	S.N.S.M.	North	Santa Marta	62	12156		72	0-535	0.06	CORPOCARIBE
25		Fundación	S.N.S.M.	West	Aracataca		28			867-962		CORPOMAG
26		Garupal	S.N.S.M.	East	Valledupar, El Copey		10146			308-1194		CORPOCESAR
27		Guatapurí	S.N.S.M.	East	Valledupar	2492	1053			196-730	3.19	CORPOCESAR
28		Mallorquin	S.N.S.M.	West	El Copey		2785			322-1083		CORPOCESAR
29		**Snia. Piojó**	Isolated hills	All	Luruaco, Piojó							CRA
30		**Snia. San Lucas**	Isolated hills	All	San Jacinto del Cauca, Simití, Sta Rosa							CARDIQUE
31		**Snia de Macuira**	Isolated hills	All	Uribia							CORPOGUAJIRA
32		**Snia. Montes De María**	Isolated hills	All	S. J. de Nepomuceno, S. Jacinto, El carmen de Bolivar, Ovejas, Los Palmitos, Morroa, S. Onofre, Chalán, Toluviejo, Colosó							CARSUCRE
33		**Colinas prelitora-les Cartagena de indias**	Isolated hills	All	Cartagena de Indias, Turba-co, S.ta Rosa, S.ta Catalina							CARDIQUE
34		**Snia. Perijá**	Eastern C.	West	Urumita, Manaure, Agustin Codazzi, Becerril, La Jagua de Ibirico, San Diego							CORPOCESAR

Appendix 5 (*continues*).

Id.	Bioregion	Basin (s) and/or Areas with	Mountainous System/ Cordillera	Slope	Municipalities	(a) Areas with net suitability $p > 0.61$ (ha)	(b) Areas of TDF < 23 km (ha)	(c) Areas of PA < 23 km (ha)	(d) Areas of NRCS < 23 km (ha)	Altitudinal range (a-b); (a-c); (a-d)	% of suitable area in the basin	Environmental authority
35	Magdalena River Valley	Aipe	Central C.	East	Neiva	173	52			702-776	0.16	CAM
36		Alvarado	Central C.	East	Ibagué		23			724-757		CORPOTOLIMA
37		Apulo	Eastern C.	West	Cachipay, La Mesa, Tena, Anolaima, Zipacón	6675	4935			518-1548	12.36	CAR
38		Bache	Central C.	East	Neiva, Palermo, Santa María	5544	1102			554-814	3.76	CAM
39		Bogotá	Eastern C.	West	El Colegio, Tequendama, La Mesa, Tena	2973	8233	323		335-1751	0.61	CAR
40		Cabrera	Eastern C.	West	Alpujarra	1172	9533	5800		368-1621	0.48	CAM
41		Coello	Central C.	East	Ibague	85	180	134		693-1108	0.05	CORPOTOLIMA
42		Direct to Magdalena	Central C.-Oriental	East-West	Tello, Neiva, Rivera, Dolores, Prado, Guaduas, S.J. Rioseco, Chaguaní	7445	26814	20864		200-1797	0.17	CORMAGDALENA
43		Iquira	Central C.	East	Íquira	249				1077-1132	0.56	CAM
44		Luisa	Central C.	East	Valle del San Juan		5			638-660		CORPOTOLIMA
45		Negro	Eastern C.	West	Caparrapí, Villeta, Guaduas, Pacho, Chaguaní, Dolores	3570	750	163	10	418-1207	11.22	CORPOTOLIMA
46		Neiva	Eastern C.	West	Riverar, Algeciras, Campoalegre	536	4508			495-1530	0.48	CAM
47		Prado	Eastern C.	West	Pardo, Icononzo, Melgar		2913	87		307-1324		CORPOTOLIMA
48		Recio	Central C.	East	Ambalema		96			237-737		CORPOTOLIMA
49		Seco	Eastern C.	West	S.J. Rioseco, Anolaima	1025	1460			378-1298	1.69	CAR
50		Sumapaz	Eastern C.	West	Tibacuy, Fusagasugá, Arbelaez, Silvania	7842	3242	2339	1	305-1744	2.37	CAR
51		Tobia	Eastern C.	West	Villeta, Quipile, Sasaima, La Vega, San Francisco, Nocaima, Vianí, Bituima, Anolaima, Albán, Guayabales de Síquima	11512			2	966-1790	13.48	CAR
52		Villa Vieja	Eastern C.	West	Tello	165		3606		428-775	0.18	CAM
53		Yaguará	Central C.	East	Iquira	93				955-1078	0.05	CAM

54	Patía Valley	Patia-Guachicono	Central C.	West	Patía, La Vega, La Sierra, Rosas	9299	1186			612-1443	3.5	CRC
55		**Rocky massifs**	Isolated hills	Central & North	Patía, Timbío, Mercaderes							CRC
56		**Juanambu-Guaitara**	Deep canyons	South	Leyva, Policarpa, El Rosario, Taminango							CORPONARIÑO
57	Santander Region	Catatumbo	Eastern C.	East	Ocaña, Río de Oro, Ábrego	1583	13528	2231		481-1778	0.48	CORPONOR
58		Chicamocha	Eastern C.	West	Girón		448			1159-1364		CAS
59		Chucurí	Eastern C.	West	S. V. de Chucurí, Betulia, Zapatoca			23181		178-1776		CAS
60		De Oro	Eastern C.	West	Bucaramanga, Floridablanca, Pidecuesta	2638	8363	16		650-1798	4.82	CDMB
61		Direct to Magdalena	Eastern C.	West	Ocaña, río de Oro	617		41		1453-1553	0.17	CAS
62		Lebrija	Eastern C.	West	Ocaña, Charta, Tona, Lebrija	2537	22139	196		280-1776	0.54	CDMB
63		Oponcito	Eastern C.	East	S. V. de Chucurí			597		1011-1221		CAS
64		Pamplonita	Eastern C.	East	Cúcuta, Bochalema	186	15973			304-1756	0.15	CORPONOR
65		Sardinata	Eastern C.	East	Lourdes	147				1325-1429	0.09	CORPONOR
66		Simana	Eastern C.	West	Ocaña		24			1511-1563		CORPOCESAR
67		Sogamoso	Eastern C.	West	Girón	339	5172	30518		177-1785	0.17	CAS
68		Suarez	Eastern C.	West	Los Santos			1		678-678		CAS
69		Zulia	Eastern C.	East	Cúcuta, Gramalote, Santiago, San Cayetano, Cucutilla, Salazar, Durania	1187	10559	542		154-1696	0.37	CORPONOR

Abbreviations for the Jurisdictions of Environmental Authority. **COROPOCESAR**: Regional Autonomous Corporation of Cesar. **CORPAMAG**: Regional Autonomous Corporation of Magdalena; **CAR**: Regional Autonomous Corporation of Cundinamarca; **CORPOTOLIMA**: Regional Autonomous Corporation of Tolima; **CAM**: Regional Autonomous Corporation of Alto Magdalena; **CORANTIOQUIA:** Regional Autonomous Corporation of Central Antioquia; **CVC**: Regional Autonomous Corporation of Cauca Valley; **CRC**: Regional Autonomous Corporation of Cauca; **CAS**: Regional Autonomous Corporation of Santander; **CDMB**: Regional Autonomous Corporation for the Defence of the Bucaramanga Plateau; **CORPONOR**: Regional Autonomous Corporation of the Northeastern Border; **CARDIQUE**: Regional Autonomous Corporation of the Dique Canal; **CORPOCARIBE:** Regional Autonomous Corporation of the Caribbean.

Appendix 6. List of Tropical Dry Forest (TDF) orchid "core" recorded in five tropical dry forest regions in Colombia. Available only elctronically as supplemnetal material at: http://www.lankesteriana.org/LankesterianaJournal/17(1)/Reina_rodriguez%20et%20al%202017%20Appendix6.pdf