

doi: 10.1590/0102-33062017abb0317

**Text S1.** Analysis script developed in R environment.

```

### Setting working directory
setwd("..\Artigo_ActaBotanicaBrasilica\R")
### Saving the workspace
save.image(file="..\Artigo_ActaBotanicaBrasilica\R\script_abb.RData")
#####
##### Turning the areas comparable (individual sample effort): analysis #####
#####

## import packages
library(iNEXT)
library(ggplot2)
library(reshape)
library(reshape2)
library(devtools)
library(entropart)
library(car)
library(vegan)

## data
dadostotal<-read.table("totalspr.csv", head=T, sep=";")
colnames(dadostotal)
dados<-dadostotal[dadostotal$cap1_cm >= 15.0,] #selecting the individuals with CAP >= 15 cm
dados_rarefaction<- cast(dados, especietnrs ~ area, value='abundancia', fun.aggregate = sum)
dados_rarefaction<-dados_rarefaction[-210,] #withdraw the dead trees
rownames(dados_rarefaction)<-dados_rarefaction$especietnrs # setting the row names
dados_rarefaction<-dados_rarefaction[,-1]
colnames(dados_rarefaction)<- c("Area 1", "Area 2", "Area 3") #setting the columns names
dados_rarefaction<-as.data.frame(dados_rarefaction)
str(dados_rarefaction)

## individual rarefaction with exotic species + 1000 simulations
individual_rarefaction<-iNEXT(dados_rarefaction, q=0, datatype="abundance", endpoint=600, nboot=1000)
g<-ggiNEXT(individual_rarefaction, type=1, facet.var="none", grey=TRUE) +
# rarefaction type
theme(legend.position= c(0.85, 0.2)) #graph without legend
g<-g + scale_y_continuous(breaks=seq(0,140,20), limits = c(0,140)) + # axis limits and thicks
xlab("Specimes") + ylab ("Rate (95% confidence interval)") + # axis labels
annotate("text", x=0, y=140, label="A", size=10)
g # showing the graph

## diversity profile
dados_dp<-MetaCommunity(dados_rarefaction) # creating the metacommunity file
dp<-DivProfile(seq(0, 3, 0.2), dados_dp, Biased = FALSE, NumberOfSimulations = 10)
# creating the diversity profile
par(las=1)
plot(x = dp$Order, y = dp$CommunityAlphaDiversities[, "Area 1"], type="l", ylim = c(0,140), col = "black", lwd = 3.5, lty = 1,
     main="", xlab = "alfa", ylab = "Diversity", cex.axis=1.2, cex.lab=1.5) # plotting Area 1
lines(x = dp$Order, y = dp$CommunityAlphaDiversities[, "Area 2"], col = "gray50", lwd = 3.5, lty = 2) # plotting Area 2
lines(x = dp$Order, y = dp$CommunityAlphaDiversities[, "Area 3"], col = "gray70", lwd = 3.5, lty = 3) # plotting Area 3
legend("topright", legend=c("Area 1", "Area 2", "Area 3" # plotting the legend
), col=c("black", "gray50", "gray70"
), lwd = 3.5, lty = c(1,2,3), inset=0.01, bty = "n")
text(0, 135, labels="B", cex=2) # plotting the label

```



```

## data
dados_comp<- cast(dadostotal, parcela + area ~ origem, value='abundancia', fun.aggregate = sum)
str(dados_comp)
## exotic
# Normality Test - Shapiro-Wilk
shapiro.test(dados_comp$e)
# Levene's test for homogeneity of variance
leveneTest(dados_comp$e, dados_comp$area)
# Kruskal-Wallis Test
kruskal.test(e ~ area, data = dados_comp)
# independent 2-group Mann-Whitney U Test
areas12<-dados_comp[dados_comp$area < 3,] # comparison between Areas 1 and 2
wilcox.test(e ~ area, data = areas12)
areas13<-dados_comp[dados_comp$area != 2,] # comparison between Areas 1 and 3
wilcox.test(e ~ area, data = areas13)
areas23<-dados_comp[dados_comp$area >= 2,] # comparasian between Areas 2 and 3
wilcox.test(e ~ area, data = areas23)

## data
dados_e<-dadostotal[dadostotal$origem == "e",] #selecting the exotic individuals
nrow(dados_e)
dados_e$cap1_cm[dados_e$cap1_cm>=15.0] <- "d"
dados_e$cap1_cm[dados_e$cap1_cm<15.0] <- "r"
dados_e$cap1_cm[dados_e$cap1_cm!="d" & dados_e$cap1_cm!="r"] <- "r"
dados_e<- cast(dados_e, parcela + cap1_cm ~ especietnrs, value='abundancia', fun.aggregate = sum)
colnames(dados_e)[colnames(dados_e)=="cap1_cm"] <- "strata"
colnames(dados_e) <- make.cepnames(colnames(dados_e))
colnames(dados_e)
nrow(dados_e)
parcela<-c(paste0("p", 1:128)) # creating the missing plots (without exotic species)
as.factor(parcela)
strata<-c(rep("r",64), rep("d",64))
dados_e2<-data.frame(parcela, strata)
names(dados_e2)<-c("parcela", "strata")
dados_e2$Archcunn<-c(rep(0,128))
dados_e2$Caryuren<-c(rep(0,128))
dados_e2$Coffarab<-c(rep(0,128))
dados_e2$Dracfrag<-c(rep(0,128))
dados_e2$Eriojapo<-c(rep(0,128))
dados_e2$Livichin<-c(rep(0,128))
dados_e2$Persamer<-c(rep(0,128))
dados_e2$Pinusp<-c(rep(0,128))
dados_e2$Pittundu<-c(rep(0,128))
dados_e2$Syzyjamb<-c(rep(0,128))
dados_e<-rbind(dados_e, dados_e2)

# Normality Test - Shapiro-Wilk
shapiro.test(dados_e$Archcunn)
shapiro.test(dados_e$Caryuren)
shapiro.test(dados_e$Coffarab)
shapiro.test(dados_e$Dracfrag)
shapiro.test(dados_e$Eriojapo)
shapiro.test(dados_e$Livichin)
shapiro.test(dados_e$Persamer)

```



```

shapiro.test(dados_e$Pinusp)
shapiro.test(dados_e$Pittundu)
shapiro.test(dados_e$Syzyjamb)
# Levene's test for homogeneity of variance
leveneTest(dados_e$Archcunn, dados_e$strata)
leveneTest(dados_e$Caryuren, dados_e$strata)
leveneTest(dados_e$Coffarab, dados_e$strata)
leveneTest(dados_e$Dracfrag, dados_e$strata)
leveneTest(dados_e$Eriojapo, dados_e$strata)
leveneTest(dados_e$Livichin, dados_e$strata)
leveneTest(dados_e$Persamer, dados_e$strata)
leveneTest(dados_e$Pinusp, dados_e$strata)
leveneTest(dados_e$Pittundu, dados_e$strata)
leveneTest(dados_e$Syzyjamb, dados_e$strata)
# independent 2-group Mann-Whitney U Test
wilcox.test(Archcunn ~ strata, data = dados_e)
wilcox.test(Caryuren ~ strata, data = dados_e)
wilcox.test(Coffarab ~ strata, data = dados_e)
wilcox.test(Dracfrag ~ strata, data = dados_e)
wilcox.test(Eriojapo ~ strata, data = dados_e)
wilcox.test(Livichin ~ strata, data = dados_e)
wilcox.test(Persamer ~ strata, data = dados_e)
wilcox.test(Pinus ~ strata, data = dados_e)
wilcox.test(Pittundu ~ strata, data = dados_e)
wilcox.test(Syzyjamb ~ strata, data = dados_e)

## data
dadosdc<-read.table("densitycoverage.csv", head=T, sep=";")
colnames(dadosdc)
# Density:Coverage graph
dc_lm=lm(formula = dadosdc$coverage ~ dadosdc$density, data = dadosdc)
summary(dc_lm)
dc_graph<-ggplot(dadosdc, aes(x=dadosdc$density, y=dadosdc$coverage))
) + geom_point(alpha = 1, size = 4) + geom_smooth(method='lm', se = FALSE, colour="black")
dc_graph<-dc_graph + ylab("Exotic species coverage (m2)"
) + xlab("Density (indiv.ha-1)"
) + annotate("text", x=39, y=190, label= paste("y= 1.6x + 32.3"))
) + annotate("text", x=39, y=180, label= paste("R2 = 0.18"))
) + annotate("text", x=25, y=190, label= "paste(italic(Livistona), italic(chinensis))", parse=TRUE
) + annotate("text", x=12, y=130, label= "paste(italic(Archontophoenix), italic(cunninghamiana))", parse=TRUE
) + annotate("text", x=7, y=63, label= "paste(italic(Pittosporum), italic(undulatum))", parse=TRUE
) + annotate("text", x=8, y=36, label= "paste(italic(Caryota), italic(urens))", parse=TRUE
) + annotate("text", x=14.5, y=20, label= "paste(italic(Persea), italic(americana))", parse=TRUE
) + annotate("text", x=36, y=68.5, label= "paste(italic(Coffea), italic(arabica))", parse=TRUE
) + annotate("text", x=38, y=43, label= "paste(italic(Syzygium), italic(jambos))", parse=TRUE
) + annotate("text", x=3.5, y=19.5, label= "paste(italic(Pinus), sp)", parse=TRUE
) + annotate("text", x=6.6, y=10, label= "paste(italic(Eriobotrya), italic(japonica))", parse=TRUE
) + annotate("text", x=9.7, y=3.5, label= "paste(italic(Dracaena), italic(fragsrans))", parse=TRUE
dc_graph + theme (axis.text=element_text(size=12), axis.title=element_text(size=14),
axis.ticks.length = unit (2, "mm"))
dev.off()

citation("iNEXT")
citation("ggplot2")

```

```
citation("reshape")
citation("reshape2")
citation("devtools")
citation("entropart")
citation("car")
citation("vegan")
```

**Table S2.** Quantitative descriptors of the canopy layer of Area 1 (lowest level of disturbance), in descending order of importance value (IV). RD = relative density, RDo = relative dominance, RF = relative frequency, IV = importance value, CV = cover value.

Species	RD (%)	RDo (%)	RF (%)	IV	CV
<i>Cupania oblongifolia</i>	8.82	9.27	5.98	24.07	18.09
<i>Guarea macrophylla</i>	6.30	1.99	5.16	13.45	8.29
<i>Pouteria reticulata</i>	4.20	6.16	2.99	13.35	10.37
<i>Eugenia pruinosa</i>	2.94	5.58	2.99	11.51	8.52
<i>Aspidosperma olivaceum</i>	2.94	5.24	2.45	10.63	8.18
<i>Cordia sellowiana</i>	3.99	2.01	3.80	9.81	6.00
<i>Eugenia excelsa</i>	4.62	1.42	3.53	9.58	6.04
<i>Ecclinusa ramiflora</i>	2.94	3.11	3.26	9.31	6.05
<i>Mouriri chamissoana</i>	1.68	5.80	1.63	9.11	7.48
<i>Heisteria silvianii</i>	2.52	4.29	1.90	8.71	6.81
<i>Calyptranthes lucida</i>	3.78	1.65	2.72	8.15	5.44
<i>Calyptranthes grandifolia</i>	2.73	2.00	2.72	7.45	4.73
<i>Trichilia silvatica</i>	2.94	0.58	3.26	6.78	3.52
<i>Rudgea jasminoides</i>	2.94	0.67	2.99	6.60	3.61
<i>Cordiera myrciifolia</i>	2.73	0.38	2.72	5.83	3.11
<i>Tachigali denudata</i>	0.21	5.21	0.27	5.69	5.42
<i>Ocotea venulosa</i>	1.89	1.32	2.17	5.38	3.21
<i>Tapirira guianensis</i>	0.42	4.28	0.54	5.24	4.70
<i>Cryptocarya saligna</i>	1.47	2.14	1.36	4.97	3.61
<i>Sloanea guianensis</i>	1.05	2.41	1.36	4.82	3.46
<i>Endlicheria paniculata</i>	1.05	1.94	1.36	4.35	2.99
<i>Eugenia sp2</i>	1.26	1.25	1.36	3.87	2.51
<i>Faramea montevidensis</i>	1.47	0.34	1.90	3.71	1.81
<i>Trichilia glabra</i>	1.26	0.65	1.63	3.54	1.91
<i>Cabralea canjerana</i>	0.63	2.05	0.82	3.49	2.68
<i>Eugenia neoglomerata</i>	1.26	0.49	1.63	3.38	1.75
<i>Myrcia aethusa</i>	1.26	0.70	1.09	3.04	1.96
<i>Eugenia handroana</i>	1.26	0.19	1.36	2.81	1.45
<i>Ocotea aciphylla</i>	1.05	0.38	1.36	2.79	1.43
<i>Cariniana estrellensis</i>	0.21	2.28	0.27	2.76	2.49
<i>Cryptocarya mandiocana</i>	0.63	1.29	0.82	2.74	1.92
<i>Myrcia tijucensis</i>	1.05	0.58	1.09	2.72	1.63
<i>Alchornea sidifolia</i>	0.42	1.63	0.54	2.59	2.05
<i>Euterpe edulis</i>	1.47	0.31	0.82	2.59	1.78
<i>Amaioua intermedia</i>	0.84	0.39	1.09	2.32	1.23
<i>Cupania emarginata</i>	0.63	0.82	0.82	2.27	1.45
<i>Myrcia multiflora</i>	0.42	1.30	0.54	2.26	1.72
<i>Neomitrannes glomerata</i>	0.63	0.70	0.82	2.15	1.33
Rubiaceae sp1	0.42	1.10	0.54	2.06	1.52
<i>Syagrus romanzoffiana</i>	0.42	1.08	0.54	2.05	1.50
<i>Protium widgrenii</i>	0.84	0.29	0.82	1.94	1.13
<i>Machaerium nyctitans</i>	0.63	0.73	0.54	1.90	1.36
<i>Cordia ecalyculata</i>	0.42	1.17	0.27	1.86	1.59
<i>Vernonanthura divaricata</i>	0.42	0.86	0.54	1.82	1.28
<i>Tovomitopsis paniculata</i>	0.42	0.86	0.54	1.82	1.28
<i>Ocotea nectandrifolia</i>	0.21	1.30	0.27	1.78	1.51
<i>Mollinedia lanceolata</i>	0.63	0.27	0.82	1.71	0.90
<i>Cinnamomum triplinerve</i>	0.63	0.43	0.54	1.60	1.06

## Management priorities for exotic plants in an urban Atlantic Forest reserve

**Table S2.** Cont.

Species	RD (%)	RDo (%)	RF (%)	IV	CV
<i>Eugenia cf. brevistyla</i>	0.63	0.11	0.82	1.55	0.74
Myrtaceae sp2	0.63	0.09	0.82	1.54	0.72
<i>Sloanea hirsuta</i>	0.63	0.09	0.82	1.53	0.72
<i>Pera glabrata</i>	0.42	0.55	0.54	1.51	0.97
<i>Podocarpus sellowii</i>	0.42	0.49	0.54	1.46	0.91
<i>Rudgea gardenioides</i>	0.42	0.44	0.54	1.41	0.87
<i>Ixora gardneriana</i>	0.42	0.28	0.54	1.25	0.70
<i>Matayba elaeagnoides</i>	0.21	0.75	0.27	1.23	0.96
Lauraceae sp1	0.42	0.24	0.54	1.21	0.66
<i>Cupania vernalis</i>	0.42	0.50	0.27	1.19	0.92
<i>Casearia sylvestris</i>	0.21	0.70	0.27	1.18	0.91
<i>Buchenavia kleinii</i>	0.42	0.20	0.54	1.17	0.62
<i>Matayba juglandifolia</i>	0.42	0.19	0.54	1.16	0.61
<i>Eugenia cereja</i>	0.42	0.19	0.54	1.16	0.61
<i>Hirtella hebeclada</i>	0.42	0.16	0.54	1.13	0.58
<i>Nectandra grandiflora</i>	0.21	0.63	0.27	1.11	0.84
<i>Jacarata heptaphylla</i>	0.42	0.15	0.54	1.11	0.57
<i>Cyathea delgadii</i>	0.42	0.14	0.54	1.10	0.56
<i>Marlierea tomentosa</i>	0.42	0.13	0.54	1.10	0.55
<i>Citronella paniculata</i>	0.42	0.12	0.54	1.08	0.54
<i>Myrciaria floribunda</i>	0.42	0.11	0.54	1.08	0.53
Myrtaceae sp3	0.42	0.11	0.54	1.08	0.53
<i>Machaerium villosum</i>	0.42	0.09	0.54	1.06	0.51
<i>Actinostemon klotzschii</i>	0.42	0.09	0.54	1.06	0.51
<i>Zollernia ilicifolia</i>	0.42	0.08	0.54	1.05	0.50
<i>Jacaranda puberula</i>	0.21	0.32	0.27	0.80	0.53
<i>Prunus myrtifolia</i>	0.42	0.10	0.27	0.80	0.52
<i>Alchornea glandulosa</i>	0.21	0.24	0.27	0.72	0.45
<i>Vochysia magnifica</i>	0.21	0.23	0.27	0.71	0.44
<i>Alchornea triplinervia</i>	0.21	0.23	0.27	0.71	0.44
<i>Myrsine lancifolia</i>	0.21	0.14	0.27	0.62	0.35
<i>Brosimum glaziovii</i>	0.21	0.12	0.27	0.60	0.33
<i>Guapira opposita</i>	0.21	0.11	0.27	0.59	0.32
<i>Inga capitata</i>	0.21	0.09	0.27	0.57	0.30
<i>Esenbeckia grandiflora</i>	0.21	0.08	0.27	0.57	0.29
<i>Eugenia sp1</i>	0.21	0.07	0.27	0.56	0.28
<i>Daphnopsis fasciculata</i>	0.21	0.07	0.27	0.55	0.28
<i>Nectandra oppositifolia</i>	0.21	0.07	0.27	0.55	0.28
Lauraceae sp2	0.21	0.05	0.27	0.53	0.26
<i>Ocotea odorifera</i>	0.21	0.05	0.27	0.53	0.26
<i>Guatteria australis</i>	0.21	0.05	0.27	0.53	0.26
<i>Symplocos celastrinea</i>	0.21	0.05	0.27	0.53	0.26
<i>Sloanea obtusifolia</i>	0.21	0.04	0.27	0.53	0.25
<i>Ocotea teleiandra</i>	0.21	0.04	0.27	0.52	0.25
<i>Calyptranthes sp1</i>	0.21	0.04	0.27	0.52	0.25
<i>Garcinia gardneriana</i>	0.21	0.04	0.27	0.52	0.25
<i>Bignoniaceae sp1</i>	0.21	0.03	0.27	0.52	0.24
<i>Psychotria leiocarpa</i>	0.21	0.03	0.27	0.51	0.24
<i>Rudgea recurva</i>	0.21	0.03	0.27	0.51	0.24
<i>Virola bicuhyba</i>	0.21	0.03	0.27	0.51	0.24
<i>Sorocea bonplandii</i>	0.21	0.03	0.27	0.51	0.24
<i>Eugenia ternatifolia</i>	0.21	0.02	0.27	0.51	0.23
<i>Ocotea catharinensis</i>	0.21	0.02	0.27	0.50	0.23
<i>Licania hoehnei</i>	0.21	0.02	0.27	0.50	0.23
<i>Margaritopsis cephalantha</i>	0.21	0.02	0.27	0.50	0.23

**Table S3.** Quantitative descriptors of canopy layer of Area 2 (intermediate level of disturbance), in descending order of importance value (IV). RD = relative density, RDo = relative dominance, RF = relative frequency, IV = importance value, CV = cover value.

Species	RD (%)	RDo (%)	RF (%)	IV	CV
<i>Alchornea sidifolia</i>	14.82	26.35	6.79	47.96	41.18
<i>Syagrus romanzoffiana</i>	7.16	14.96	4.96	27.08	22.11
<i>Guarea macrophylla</i>	8.86	3.59	5.74	18.19	12.45
<i>Casearia sylvestris</i>	4.26	2.37	3.66	10.29	6.63
<i>Euterpe edulis</i>	3.24	2.14	2.35	7.73	5.38
<i>Copaifera langsdorffii</i>	0.85	4.18	1.04	6.07	5.03
<i>Machaerium brasiliense</i>	1.36	2.22	1.57	5.15	3.59
<i>Leucochloron incuriale</i>	0.51	3.14	0.78	4.43	3.65
<i>Cordia sellowiana</i>	1.53	1.07	1.83	4.43	2.60
<i>Miconia cabucu</i>	1.19	1.95	1.04	4.19	3.15
<i>Ocotea lanata</i>	1.53	0.29	2.35	4.17	1.82
<i>Prunus myrtifolia</i>	1.19	1.41	1.57	4.17	2.60
<i>Psychotria suterella</i>	1.70	0.43	1.83	3.96	2.14
<i>Myrsine umbellata</i>	1.87	0.78	1.31	3.96	2.66
<i>Eugenia excelsa</i>	1.87	0.40	1.57	3.84	2.27
<i>Gonatogyne brasiliensis</i>	1.87	1.41	0.52	3.80	3.28
<i>Miconia latecrenata</i>	1.53	0.70	1.57	3.80	2.23
<i>Cupania oblongifolia</i>	1.53	0.69	1.57	3.79	2.23
<i>Cupania vernalis</i>	1.19	0.60	1.57	3.36	1.80
<i>Nectandra oppositifolia</i>	1.19	0.78	1.31	3.27	1.97
<i>Cordiera myrciifolia</i>	1.19	0.23	1.57	2.99	1.42
<i>Ocotea puberula</i>	1.19	0.37	1.31	2.86	1.56
<i>Ocotea diospyrifolia</i>	1.19	0.33	1.31	2.83	1.52
<i>Eugenia ligustrina</i>	0.85	0.66	1.31	2.82	1.51
<i>Croton floribundus</i>	0.85	0.90	1.04	2.80	1.75
<i>Ecclinusa ramiflora</i>	0.34	1.93	0.52	2.79	2.27
<i>Cabralea canjerana</i>	0.85	0.58	1.04	2.47	1.43
<i>Sapium glandulosum</i>	0.68	0.94	0.78	2.41	1.62
<i>Trichilia emarginata</i>	1.02	0.30	1.04	2.37	1.33
<i>Amaioua intermedia</i>	1.19	0.39	0.78	2.37	1.58
<i>Ouratea semiserrata</i>	0.34	1.70	0.26	2.30	2.04
<i>Geonoma schottiana</i>	0.85	0.13	1.31	2.29	0.98
<i>Pimenta pseudocaryophyllus</i>	0.68	0.55	1.04	2.28	1.24
<i>Rudgea gardenioides</i>	0.85	0.37	1.04	2.26	1.22
<i>Matayba elaeagnoides</i>	0.85	0.58	0.78	2.21	1.43
<i>Myrcia splendens</i>	0.85	0.30	1.04	2.20	1.15
<i>Tibouchina mutabilis</i>	0.85	0.28	1.04	2.18	1.13
<i>Nectandra megapotamica</i>	0.68	0.39	1.04	2.12	1.07
<i>Ilex paraguaiensis</i>	0.34	1.21	0.52	2.07	1.55
<i>Psychotria vellosiana</i>	0.51	0.61	0.78	1.90	1.12
<i>Ocotea silvestris</i>	0.68	0.15	1.04	1.87	0.83
<i>Xylopia brasiliensis</i>	0.51	0.44	0.78	1.73	0.95
<i>Campomanesia eugenoides</i>	0.51	0.40	0.78	1.69	0.91
<i>Esenbeckia grandiflora</i>	0.51	0.38	0.78	1.68	0.89
<i>Pera glabrata</i>	0.68	0.19	0.78	1.65	0.87
<i>Coccobola warmingii</i>	0.51	0.33	0.78	1.63	0.84
<i>Eugenia sp1</i>	0.34	0.76	0.52	1.62	1.10
<i>Protium widgrenii</i>	0.34	1.01	0.26	1.61	1.35
<i>Dalbergia brasiliensis</i>	0.51	0.29	0.78	1.58	0.80
<i>Jacaranda puberula</i>	0.51	0.28	0.78	1.57	0.79
<i>Licania hoehnei</i>	0.51	0.26	0.78	1.56	0.77
<i>Rollinia sylvatica</i>	0.34	0.68	0.52	1.54	1.02
<i>Guatteria australis</i>	0.51	0.20	0.78	1.49	0.71
<i>Persea americana</i>	0.51	0.66	0.26	1.43	1.17
<i>Eugenia handroana</i>	0.51	0.13	0.78	1.42	0.64

**Table S3.** Cont.

Species	RD (%)	RDo (%)	RF (%)	IV	CV
<i>Myrciaria floribunda</i>	0.51	0.09	0.78	1.39	0.60
<i>Cecropia glaziovii</i>	0.34	0.50	0.52	1.37	0.84
<i>Solanum bullatum</i>	0.51	0.29	0.52	1.32	0.80
<i>Coutarea hexandra</i>	0.34	0.43	0.52	1.29	0.77
<i>Ocotea brachybotrya</i>	0.34	0.40	0.52	1.27	0.75
<i>Sebastiania brasiliensis</i>	0.51	0.21	0.52	1.24	0.72
<i>Tapirira guianensis</i>	0.17	0.76	0.26	1.19	0.93
<i>Zanthoxylum rhoifolium</i>	0.34	0.32	0.52	1.18	0.66
<i>Piptocarpha cf. macropoda</i>	0.34	0.31	0.52	1.17	0.65
<i>Eugenia sp4</i>	0.34	0.30	0.52	1.16	0.64
<i>Actinostemon klotzschii</i>	0.34	0.29	0.52	1.15	0.63
<i>Myrceugenia ovalifolia</i>	0.17	0.72	0.26	1.15	0.89
<i>Annona cacans</i>	0.34	0.27	0.52	1.14	0.61
<i>Lafoensia pacari</i>	0.34	0.27	0.52	1.13	0.61
<i>Casearia decandra</i>	0.34	0.24	0.52	1.10	0.58
<i>Pinus</i> sp.	0.17	0.65	0.26	1.09	0.82
<i>Piptocarpha cf. axillaris</i>	0.17	0.63	0.26	1.07	0.80
<i>Mollinedia uleana</i>	0.34	0.14	0.52	1.00	0.48
<i>Palicourea marcgravii</i>	0.34	0.13	0.52	0.99	0.47
<i>Sorocea bonplandii</i>	0.34	0.12	0.52	0.99	0.46
<i>Miconia sellowiana</i>	0.34	0.07	0.52	0.93	0.41
<i>Margaritopsis cephalantha</i>	0.34	0.07	0.52	0.93	0.41
<i>Marlierea tomentosa</i>	0.34	0.06	0.52	0.93	0.40
<i>Senna multijuga</i>	0.34	0.05	0.52	0.91	0.39
<i>Vernonanthura divaricata</i>	0.17	0.31	0.26	0.74	0.48
<i>Piptocarpha oblonga</i>	0.17	0.29	0.26	0.72	0.46
<i>Miconia petropolitana</i>	0.34	0.10	0.26	0.70	0.44
Indeterminada 3	0.17	0.25	0.26	0.68	0.42
<i>Syzygium jambos</i>	0.34	0.07	0.26	0.68	0.41
<i>Pouteria caitito</i>	0.17	0.22	0.26	0.65	0.39
<i>Miconia stenostachya</i>	0.17	0.19	0.26	0.62	0.36
<i>Eugenia hiemalis</i>	0.17	0.15	0.26	0.58	0.32
<i>Tibouchina pulchra</i>	0.17	0.15	0.26	0.58	0.32
<i>Xylosma glaberrima</i>	0.17	0.15	0.26	0.58	0.32
<i>Heterocondylus alatus</i>	0.17	0.14	0.26	0.57	0.31
<i>Myrsine coriacea</i>	0.17	0.13	0.26	0.57	0.30
<i>Campomanesia phaea</i>	0.17	0.13	0.26	0.56	0.30
<i>Anadenanthera colubrina</i>	0.17	0.12	0.26	0.55	0.29
<i>Amaioua guianensis</i>	0.17	0.12	0.26	0.55	0.29
<i>Garcinia brasiliensis</i>	0.17	0.11	0.26	0.54	0.28
<i>Maytenus salicifolia</i>	0.17	0.11	0.26	0.54	0.28
<i>Eugenia pruinosa</i>	0.17	0.10	0.26	0.54	0.28
<i>Tabebuia ochracea</i>	0.17	0.10	0.26	0.53	0.27
<i>Esenbeckia febrifuga</i>	0.17	0.10	0.26	0.53	0.27
<i>Myrcia hebepepetala</i>	0.17	0.09	0.26	0.52	0.26
<i>Handroanthus ochraceus</i>	0.17	0.08	0.26	0.51	0.25
<i>Annona</i> sp.	0.17	0.08	0.26	0.51	0.25
<i>Cyathea delgadii</i>	0.17	0.07	0.26	0.50	0.24
<i>Duguettia lanceolata</i>	0.17	0.07	0.26	0.50	0.24
<i>Ocotea</i> sp2	0.17	0.06	0.26	0.50	0.23
<i>Styrax camporum</i>	0.17	0.06	0.26	0.49	0.23
<i>Melastomataceae</i>	0.17	0.06	0.26	0.49	0.23
<i>Cedrela fissilis</i>	0.17	0.06	0.26	0.49	0.23
Indeterminada 1	0.17	0.06	0.26	0.49	0.23
Lauraceae sp2	0.17	0.05	0.26	0.48	0.22

**Table S3.** Cont.

Species	RD (%)	RDo (%)	RF (%)	IV	CV
<i>Microstachys serrulata</i>	0.17	0.05	0.26	0.48	0.22
Indeterminada 2	0.17	0.04	0.26	0.47	0.21
<i>Mollinedia triflora</i>	0.17	0.04	0.26	0.47	0.21
<i>Hirtella hebeclada</i>	0.17	0.04	0.26	0.47	0.21
<i>Ficus luschnathiana</i>	0.17	0.03	0.26	0.46	0.20
<i>Coffea arabica</i>	0.17	0.03	0.26	0.46	0.20
<i>Miconia ligustroides</i>	0.17	0.03	0.26	0.46	0.20
Myrtaceae sp1	0.17	0.03	0.26	0.46	0.20
<i>Matayba guianensis</i>	0.17	0.03	0.26	0.46	0.20
<i>Clethra scabra</i>	0.17	0.02	0.26	0.46	0.19
<i>Aspidosperma olivaceum</i>	0.17	0.02	0.26	0.46	0.19
<i>Eriobotrya japonica</i>	0.17	0.02	0.26	0.45	0.19
<i>Piptocarpha cf. oblonga</i>	0.17	0.02	0.26	0.45	0.19
<i>Heisteria silvianii</i>	0.17	0.02	0.26	0.45	0.19
<i>Guapira opposita</i>	0.17	0.02	0.26	0.45	0.19
<i>Machaerium nyctitans</i>	0.17	0.02	0.26	0.45	0.19
<i>Piptocarpha</i> sp1	0.17	0.02	0.26	0.45	0.19
<i>Eugenia</i> sp2	0.17	0.02	0.26	0.45	0.19
<i>Andira anthelmia</i>	0.17	0.02	0.26	0.45	0.19
<i>Solanum cernuum</i>	0.17	0.02	0.26	0.45	0.19

**Table S4.** Quantitative descriptors of canopy layer of Area 3 (highest level of disturbance), in descending order of importance value (IV). RD = relative density, RDo = relative dominance, RF = relative frequency, IV = importance value, CV = cover value.

Species	RD (%)	RDo (%)	RF (%)	IV	CV
<i>Syagrus romanzoffiana</i>	14.78	26.96	86.67	49.39	41.74
<i>Guarea macrophylla</i>	10.56	3.49	80.00	21.10	14.04
<i>Alchornea sidifolia</i>	1.92	9.06	23.33	13.04	10.98
<i>Coccobola warmingii</i>	3.65	4.12	33.33	10.71	7.77
<i>Euterpe edulis</i>	4.80	2.18	36.67	10.21	6.98
<i>Aspidosperma olivaceum</i>	1.15	7.37	13.33	9.70	8.53
<i>Cupania oblongifolia</i>	4.03	1.67	43.33	9.52	5.70
<i>Machaerium nyctitans</i>	4.22	2.03	36.67	9.49	6.26
<i>Matayba elaeagnoides</i>	3.45	0.99	46.67	8.57	4.45
<i>Croton floribundus</i>	1.92	3.81	23.33	7.79	5.73
<i>Jacaratia heptaphylla</i>	2.50	2.45	30.00	7.59	4.95
<i>Cordia sellowiana</i>	2.50	0.83	36.67	6.56	3.32
<i>Miconia cabucu</i>	1.54	2.91	13.33	5.62	4.45
<i>Cabralea canjerana</i>	1.92	1.25	26.67	5.53	3.17
<i>Annona sylvatica</i>	1.15	2.31	16.67	4.93	3.46
<i>Ocotea venulosa</i>	2.50	0.79	16.67	4.75	3.28
Indeterminada 4	0.96	2.89	10.00	4.74	3.85
<i>Ocotea</i> sp1	0.77	2.02	13.33	3.97	2.79
<i>Myrciaria floribunda</i>	1.34	0.28	23.33	3.68	1.62
<i>Ecclinusa ramiflora</i>	0.96	1.25	13.33	3.38	2.21
<i>Nectandra oppositifolia</i>	0.96	0.95	16.67	3.38	1.91
<i>Protium widgrenii</i>	1.34	0.46	16.67	3.27	1.80
<i>Luehea grandiflora</i>	1.15	0.59	16.67	3.21	1.74
<i>Archontophoenix cunninghamiana</i>	1.15	0.96	10.00	3.00	2.12
<i>Amaioua intermedia</i>	0.96	0.30	16.67	2.73	1.26
<i>Aniba viridis</i>	0.58	1.25	10.00	2.71	1.82
<i>Cupania emarginata</i>	0.77	0.73	13.33	2.67	1.49
<i>Prunus myrtifolia</i>	0.77	0.61	13.33	2.56	1.38
<i>Alchornea triplinervia</i>	0.58	1.29	6.67	2.46	1.87
<i>Licania hoehnei</i>	0.77	0.41	13.33	2.36	1.18
<i>Ocotea corymbosa</i>	0.77	0.17	13.33	2.11	0.93

## Management priorities for exotic plants in an urban Atlantic Forest reserve

**Table S4.** Cont.

Species	RD (%)	RDo (%)	RF (%)	IV	CV
<i>Andira fraxinifolia</i>	0.77	0.09	13.33	2.03	0.86
<i>Inga sessilis</i>	0.38	1.05	6.67	2.02	1.43
<i>Pittosporum undulatum</i>	0.77	0.31	10.00	1.96	1.08
<i>Dalbergia brasiliensis</i>	0.58	0.43	10.00	1.89	1.01
<i>Pera glabrata</i>	0.58	0.72	6.67	1.88	1.29
<i>Xylopia brasiliensis</i>	0.38	0.74	6.67	1.72	1.13
<i>Ocotea pulchella</i>	0.19	1.18	3.33	1.67	1.37
<i>Campomanesia guaviroba</i>	0.58	0.13	10.00	1.59	0.71
<i>Myrcia tijucensis</i>	0.58	0.12	10.00	1.58	0.70
<i>Tachigali denudata</i>	0.58	0.12	10.00	1.58	0.70
<i>Ocotea lanata</i>	0.58	0.10	10.00	1.56	0.67
<i>Caryota urens</i>	0.38	0.87	3.33	1.55	1.25
<i>Cordiera myrtifolia</i>	0.58	0.07	10.00	1.53	0.65
<i>Trichilia hirta</i>	0.19	0.93	3.33	1.41	1.12
<i>Esenbeckia grandiflora</i>	0.77	0.25	3.33	1.31	1.02
<i>Ouratea semiserrata</i>	0.38	0.29	6.67	1.26	0.67
<i>Trichilia lepidota</i>	0.38	0.58	3.33	1.25	0.96
<i>Miconia cinnamomifolia</i>	0.19	0.77	3.33	1.25	0.96
<i>Miconia budlejoides</i>	0.58	0.06	6.67	1.23	0.64
<i>Heisteria silvianii</i>	0.38	0.20	6.67	1.17	0.59
<i>Machaerium villosum</i>	0.38	0.20	6.67	1.17	0.58
<i>Vitex polygama</i>	0.38	0.19	6.67	1.17	0.58
<i>Miconia lepidota</i>	0.38	0.18	6.67	1.15	0.56
<i>Eugenia pruinosa</i>	0.38	0.17	6.67	1.15	0.56
<i>Schefflera calva</i>	0.38	0.16	6.67	1.14	0.55
<i>Casearia decandra</i>	0.38	0.12	6.67	1.09	0.50
<i>Myrsine umbellata</i>	0.38	0.11	6.67	1.09	0.50
<i>Dalbergia frutescens</i>	0.38	0.07	6.67	1.05	0.46
<i>Posoqueria latifolia</i>	0.38	0.07	6.67	1.04	0.46
<i>Myrcia splendens</i>	0.38	0.07	6.67	1.04	0.45
<i>Eugenia dodonaeifolia</i>	0.38	0.06	6.67	1.03	0.44
<i>Sorocea bonplandii</i>	0.38	0.05	6.67	1.02	0.43
<i>Geonoma schottiana</i>	0.58	0.13	3.33	1.00	0.70
<i>Garcinia Gardneriana</i>	0.38	0.09	3.33	0.77	0.48
<i>Coffea arabica</i>	0.38	0.05	3.33	0.73	0.44
<i>Vochysia tucanorum</i>	0.38	0.05	3.33	0.73	0.44
<i>Ocotea silvestris</i>	0.38	0.04	3.33	0.72	0.43
<i>Ocotea aciphylla</i>	0.19	0.21	3.33	0.70	0.41
<i>Annona cacans</i>	0.19	0.21	3.33	0.69	0.40
<i>Piptocarpha cf. sellowii</i>	0.19	0.19	3.33	0.68	0.39
<i>Diplooon cuspidatum</i>	0.19	0.18	3.33	0.66	0.37
<i>Jacaranda puberula</i>	0.19	0.16	3.33	0.65	0.36
<i>Guapira sp1</i>	0.19	0.16	3.33	0.65	0.35
<i>Guettarda viburnoides</i>	0.19	0.15	3.33	0.64	0.35
<i>Ilex paraguariensis</i>	0.19	0.14	3.33	0.62	0.33
<i>Coccoloba mollis</i>	0.19	0.12	3.33	0.60	0.31
<i>Annonaceae</i>	0.19	0.08	3.33	0.57	0.27
<i>Allophylus edulis</i>	0.19	0.08	3.33	0.56	0.27
<i>Balfourodendron riedelianum</i>	0.19	0.08	3.33	0.56	0.27
<i>Marlierea sp1</i>	0.19	0.07	3.33	0.56	0.26
<i>Cyathea phalerata</i>	0.19	0.07	3.33	0.56	0.26
<i>Ocotea sp2</i>	0.19	0.07	3.33	0.55	0.26
<i>Cryptocarya mandiocana</i>	0.19	0.07	3.33	0.55	0.26
<i>Cyathea delgadii</i>	0.19	0.06	3.33	0.55	0.25
<i>Myrcia hebetpetala</i>	0.19	0.05	3.33	0.54	0.24

**Table S4.** Cont.

Species	RD (%)	RDo (%)	RF (%)	IV	CV
<i>Casearia sylvestris</i>	0.19	0.05	3.33	0.54	0.24
<i>Ocotea odorifera</i>	0.19	0.05	3.33	0.54	0.24
<i>Copaifera langsdorffii</i>	0.19	0.04	3.33	0.53	0.24
<i>Marlierea tomentosa</i>	0.19	0.04	3.33	0.53	0.23
<i>Solanum cernuum</i>	0.19	0.04	3.33	0.52	0.23
<i>Eugenia ligustrina</i>	0.19	0.04	3.33	0.52	0.23
Myrtaceae sp1	0.19	0.04	3.33	0.52	0.23
<i>Eugenia neoglomerata</i>	0.19	0.03	3.33	0.52	0.22
<i>Ocotea brachybotrya</i>	0.19	0.03	3.33	0.52	0.22
<i>Actinostemon cf. concolor</i>	0.19	0.03	3.33	0.51	0.22
<i>Inga sellowiana</i>	0.19	0.03	3.33	0.51	0.22
<i>Myrsine gardneriana</i>	0.19	0.03	3.33	0.51	0.22
<i>Seguieria langsdorffii</i>	0.19	0.03	3.33	0.51	0.22
<i>Pimenta pseudocaryophyllus</i>	0.19	0.02	3.33	0.51	0.22
<i>Campomanesia eugenoides</i>	0.19	0.02	3.33	0.51	0.22
<i>Cecropia glaziovii</i>	0.19	0.02	3.33	0.51	0.22
<i>Miconia latecrenata</i>	0.19	0.02	3.33	0.51	0.21
<i>Rudgea jasminoides</i>	0.19	0.02	3.33	0.51	0.21
<i>Faramea montevidensis</i>	0.19	0.02	3.33	0.51	0.21