Como estructurar un paper de revisión de literatura

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Objectivos

- ¿Qué es una revisión de literatura?
- Conceptos y hipótesis para artículos de revisión de literatura
- Desarrollo de la introducción
- Recolección de datos (meta análisis)
- la sección de datos suplementarios
- Desarrollo de la discusión

International Microbiology
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ORIGINAL ARTICLE

Microbiota dispersion in the Uyuni salt flat (Bolivia) as determined by community structure analyses

Cesar A. Pérez-Fernández[1] · Mercedes Iriarte[2] · Jessica Rivera-Pérez[1,3] · Raymond L. Tremblay[4,5] · Gary

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Abstract
Soil microbial communities are an important component of biological diversity and terrestrial ecosystems which for processes such as decomposition, mineralization of nutrients, and accumulation of organic matter. One of t provide information on the mechanisms regulating biodiversity is spatial scaling. We characterized the microbia using 16S rRNA gene sequences from DNA isolated from halite at various locations and correlated these to geog in the Uyuni salt flat (Bolivia). Sequences from each site were analyzed to determine any spatial patterns of diversi describe the microbial communities. Results suggest that different taxa are able to disperse over Uyuni's surface d of distance. As expected, ubiquitous taxa included members of Halobacteriaceae such as *Haloarcula*, *Halorhabdus*, *Halolamina*, and halophilic bacteria *Salinibacter*, *Halorhodospira*, and unclassified me

Forum

New Phytologist

Letters

Determinants of orchid species diversity in world islands

Introduction

Kreft *et al.* (2008) presented a global analysis of factors relating to differences in species numbers among 488 island and 970 mainland floras. They tested the relationship between island characteristics (area, isolation, topography, climate and geology) and species richness using traditional and spatial models. They found that area was the strongest determinant of island species number, followed by isolation, temperature and precipitation. Altitude and island geology have shown relatively weak albeit significant effects. Yet drivers of regional diversity may depart from these global patterns, and may also be taxon specific (Patiño *et al.*, 2014). Here we examine regional and global patterns of orchid diversity among island groups.

Ackerman *et al.* (2007) presented a comprehensive analysis of orchid species diversity in the Caribbean. Their data included 49 islands and 728 species. They found a strong relationship between the number of species and area explaining 46% of the variability. However, maximum altitude (a measure of habitat diversity on the island) was the best predictor of species richness and accounted for 79% of the variability.

Most papers, including the two mentioned earlier, assume that the relationship between logarithms of the number of species present and area is linear, although other relationships are also possible (e.g. linear relationship between nonlogged values or nonlinear relationships).

Here we compare four different models describing the dependence of species richness on area, maximum altitude in the island and its latitude, using the data on orchid species richness from a global review of islands. Besides the commonly used factors (area, latitude), we also use maximum altitude, because it was the most important factor for orchids in Ackerman *et al.* (2007).

Area and altitude of the highest peak are significantly positively correlated with the number of orchid species present on an island. Significance of latitude not surprisingly disappears when the latitudinal extent of an archipelago is small. We show that the best multivariate model for prediction of orchid species richness is the classical species–area relationship combined with linear dependence of the log number of species on altitude of the highest peak and latitude.

Oceania, (3) Western Indian Ocean, (4) Mediterranean, (5) North Atlantic, (6) Central Atlantic, (7) North American Channel Islands and Hawai'i, and (8) South America (Falklands) (Supporting Information Fig. S1) were obtained from published articles and floras (Table S1). Island area (*A*), 'altitude' – altitude of the highest peak in the island (Alt) and absolute latitude (*L*) (considered to be positive for both Northern and Southern Hemisphere) were then obtained from websites of these islands or using Google Earth.

Some small islands of the Bahamian archipelago (e.g. Rum Cay, Acklin's island, Mayaguana) were subsequently excluded from the analyses, as the orchid distribution records were not specific enough to compile species lists for individual islands (Correll & Correll, 1982) or their area and/or altitude were not available. In two regions (North American Channel Islands and Hawai'i, and the Mediterranean), the number of islands was not sufficient to enable a rigorous analysis and therefore these regions were excluded. Thus, four independent analyses were performed: (1) for combined global data of all orchid species (including data from all eight regions – 117 islands), for data on all orchid species in (2) the Caribbean (57 islands), (3) Western Pacific and Oceania (41 islands) and (4) Western Indian Ocean (six islands).

We then used multiple regression with the number of orchid species (S), or its natural logarithm, $\log_e(S)$, as dependent variables and area (A), or its logarithm, $\log_e(A)$, latitude (L) and altitude (Alt) as independent continuous variables to look for possible interactions between the independent factors (i.e. cases, when more than one factor significantly affected the species richness) and to find the best predictor of island diversity. Thus the models tested were:

Model 1: $\log_e(S_i) = \text{intercept} + a \times \log_e(A_i) + b \times \text{Alt}_i + c \times L_i$ Eqn 1(a)

Model 2: $\log e(S_i) = \text{intercept} + a \times A_i + b \times \text{Alt}_i + c \times L_i$ Eqn 1(b)

Model 3: $S_i = \text{intercept} + a \times \log_e(A_i) + b \times \text{Alt}_i + c \times L_i$ Eqn 1(c)

Model 4: $S_i = \text{intercept} + a \times A_i + b \times \text{Alt}_i + c \times L_i$ Eqn 1(d)

We then performed separate linear regressions for the relationships between: (R1) $\log_e(S)$ and $\log_e(A)$ (i.e. the data were fitted by a power function), (R2) $\log_e(S)$ and Alt and (R3) $\log_e(S)$ and L. Coefficients of determination (R^2) were always calculated and used

PeerJ

From the cage to the wild: introduc of Psittaciformes to Puerto Rico

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[2] Center for Applied Tropical Ecology and Conservation, University of Puerto Rico, Río Piedras United States of America
[3] Bureau of Research and Conservation of Habitats and Biodiversity, Puerto Rico Department o Environmental Resources, San Juan, Puerto Rico, United States of America

ABSTRACT

Introduced psittacine birds can become highly invasive. In this study, w invasions of Psittaciformes in Puerto Rico. We reviewed the literature, publi citizen science records, and performed in situ population surveys across to determine the historical and current status and distribution of psittac We used count data from *Ebird* to determine population trends. For spe populations were increasing, we modelled their potential distribution u modeling techniques. We found 46 Psittaciformes in Puerto Rico, of whi only present as pets, at least 29 species have been reported in the wild, ar there is evidence that at least 12 species are breeding. Our results indicat introduced species which have been detected as established still persist, alth in localized areas and small populations. Clear evidence of invasiveness for *Brotogeris versicolurus* and *Myiopsitta monachus*, which have greatly exp range in recent years. *Psittacara erythrogenys* and *Eupsittacula canicularis* a population increases, although to a lesser degree. The niche models predic areas for the four species, and also indicate the potential for range expansion the factors leading to invasion success, assess the potential impacts, and we discuss possible management strategies and research prospects.

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Subjects Ecology, Zoology
Keywords Birds, Cacatuidae, Parrots, Islands, Biological invasions, Psittacidae, Puerto Rico, Predicted distribution

¿Qué es una revisión de literatura científica?

1. Una revision de la literatura es esencialmente una encuesta de artículos académicos, libros, disertaciones, actas de conferencias y /o otro material publicado

2. La revisión incluye una evaluación critica de un tema comprobando una hipótesis

3. No se debe confundir con una reseña de un libro o articulo

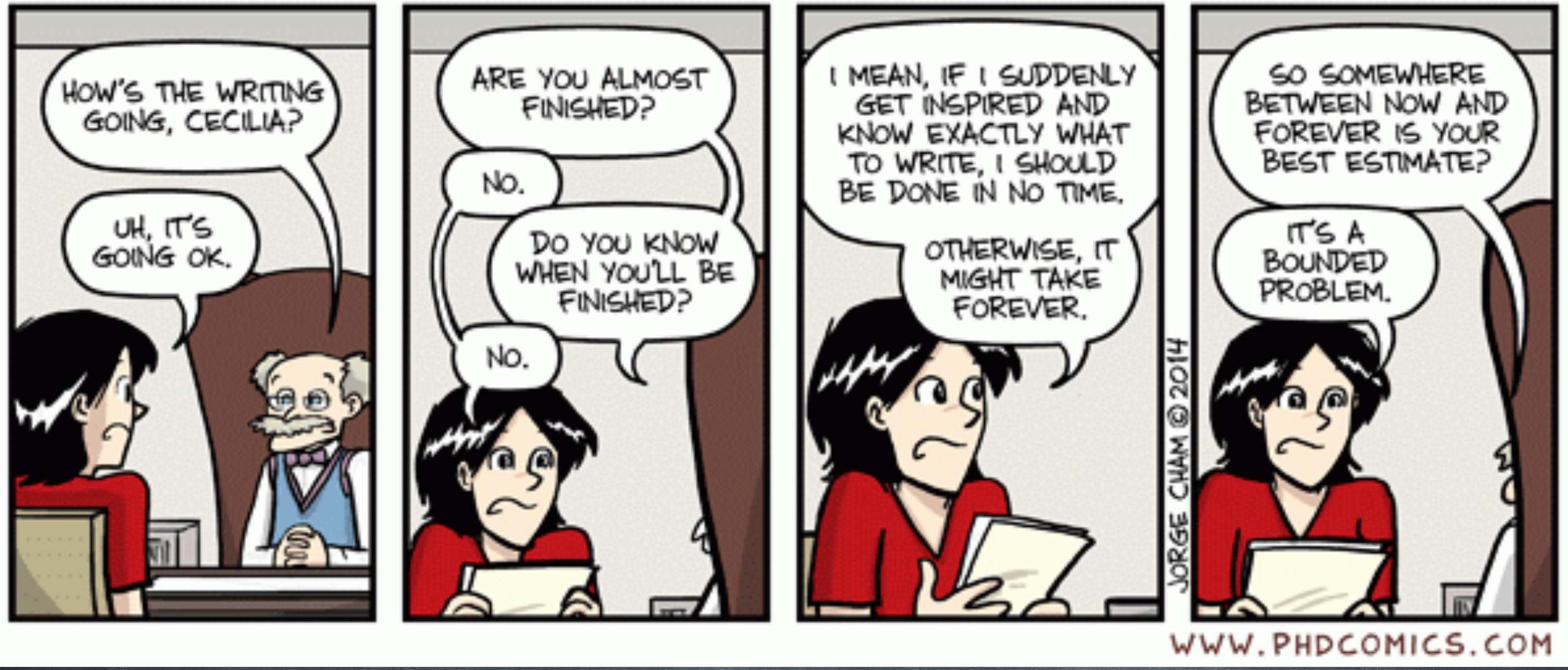
4. El autor de una revisión de la literatura suela dar una evaluación critica del area de estudio comprobando una hipótesis

Los pasos para una revisión de literatura

1. Descripción general del tema
2. Descripción de las definiciones y aclarar contradicción o variación en la definiciones
3. ¿Cuál son las hipótesis de intereses?
4. Metodología y que fuente de búsqueda de como se recolecta la información
5. Que análisis se hace para evaluar las hipótesis
6. Los resultados
7. Discussion: Evaluación de los resultados
    1. Fortaleza y debilidades de los resultados
    2. Evaluación de las hipótesis
    3. Interpretación/Variación critica de los resultados

Toma tiempo hacer una investigación

- Planifica su tiempo de investigación
- Horas/Dia/ semana

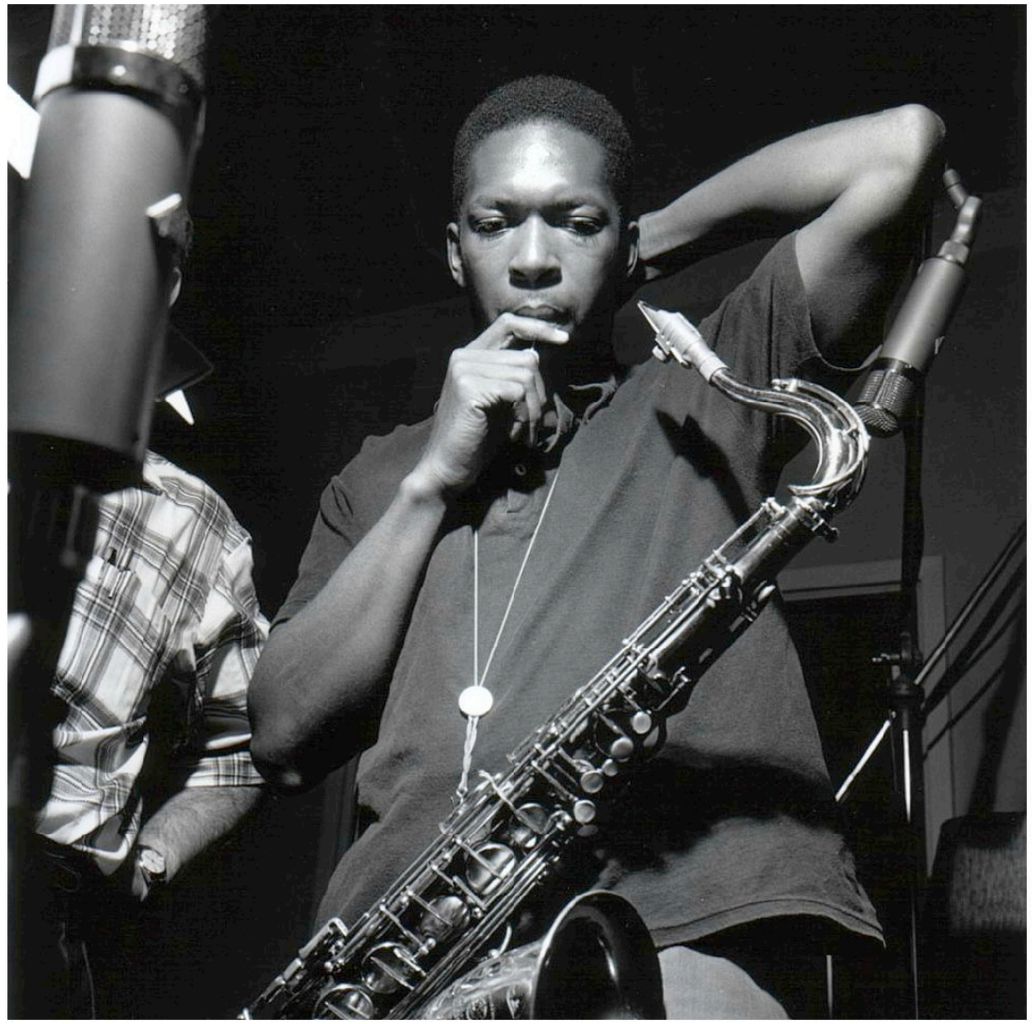


La inspiración llega haber leído.....MUCHO

Selecciona su sitio de trabajo para poder concentrarse

Planifica tus destrezas

- Improvisa tu camino hacia el éxito!!!!



John Coltrane

LOS PASOS

- El mito
  - Abstract
  - Introduction
  - Methods
  - Results
  - Conclusion/ Discussion
  - Figures
  - Tables
  - References
- Plan de acción
  - Hypothesis- Your questions/objectives
    - Methods/References
    - Results
    - Figures/References
    - Tables
      - Abstract/ Introduction/ref.
      - Abstract/Discussion/ ref.

Hipótesis

Tener una hipótesis especifica - no debería ser una hipótesis general

¿Cuál es la importancia de los polinizadores para la supervivencia de las plantas?

¿Como la eficacia de la polinización afecta la supervivencia de las plantas?

¿Como la eficacia de la polinización afecta la supervivencia de las orquídeas?

¿Cual es el efecto de tener flores al borde de la carretera sobre la diversidad de insectos?

DOI: 10.1111/ddi.13139

BIODIVERSITY RESEARCH

Diversity and Distributions WILEY

Island biogeography of native and alien plant species: Contrasting drivers of diversity across the Lesser Antilles

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Correspondence

Abstract

Aim: Understanding the factors driving the diversity of alien and native species on islands is crucial for predicting the spread of alien species and for proposing management practices to protect the unique native biodiversity that often occurs in insular ecosystems. The main objective of this study was to evaluate whether native and alien plant species respond similarly to natural biogeographic and human-related drivers.

1. Predicting the spread of alien species:
2. Evaluate if native and alien species respond similarly to natural biogeographical and human - related drivers

- The theory of island biogeography predicts that species diversity on islands will be the result of a dynamic balance between three main processes: immigration, speciation and extinction (MacArthur & Wilson, 1967). According to this theory, species richness on insular ecosystems is expected to follow positive species–area relationships and negative species–isolation relationships. Since the postulation of this theory, a large number of studies accounting for these patterns on oceanic islands have been published (Whittaker & Fernandez-Palacios, 2007; Kreft, Jetz, Mutke, Kier, & Barthlott, 2008; Matthews et al., 2016; Matthews, Rigal, Triantis, & Whittaker, 2019; Triantis, Guilhaumon, & Whittaker, 2012; Whittaker, Triantis, & Ladle, 2008). However, only until more recently have studies begun to distinguish between native alien species and consider biogeographic models involving the role of human interactions (Sax & Gaines, 2006; Carboni, Thuiller, Izzi, & Acosta, 2010; Blackburn, Cassey, & Lockwood, 2008; Helmus, Mahler, & Losos, 2014; Blackburn, Delean, Pyšek, & Cassey, 2016; Ackerman, Tremblay, Rojas-Sandoval, & Hernández-Figueroa, 2017; Silva-Rocha, Salvi, Carretero & Ficetola, 2019). Whether alien and native species on islands respond similarly to biogeographic and human-related drivers still remains an open question (Buckley & Catford, 2016; Burns, 2015; Capinha, Essl, Seebens, Moser, & Pereira, 2015). Understanding the factors driving the diversity of alien and native species is a first step to guide data collection for better predicting the spread of alien species and implementing management strategies to protect the unique native biodiversity that often occurs on insular ecosystems (Simberloff, 2000; Sax & Gaines, 2008; Blackburn et al., 2016; Rojas-Sandoval, Tremblay, Acevedo-Rodríguez & Díaz-Soltero, 2017).

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- However, only until more recently have studies begun to distinguish betwee alien species and consider biogeographic models involving the role of human interactions (referencias)

- Whether alien and native species on islands respond similarly to biogeographic and human-related drivers still remains an open question (referencias)

- Understanding the factors driving the diversity of alien and native species is a first step to guide data collection for better predicting the spread of alien species and implementing management strategies to protect the unique native biodiversity that often occurs on insular ecosystems (referencias)

- … Evaluating this question based on information from the Lesser Antilles…..

Ejemplo No tan efectivo

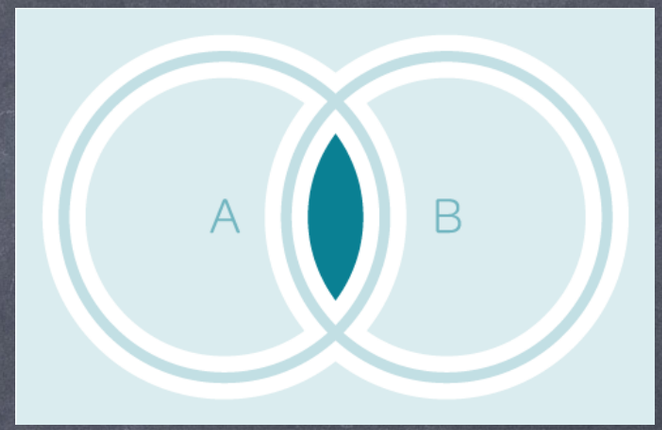
La cantidad de especies invasoras en la isla de Antigua nunca se ha estudiado, este es el primer articulo que evalúa la presencia de la especies invasoras de la isla.

La evaluación de la presencia de estas especies pudiese ser nefasto para la flora local. Se evalúa algunos parámetros ecológicos y antropogénicos que pudiese influenciar la habilidad de estas especies a propagarse.

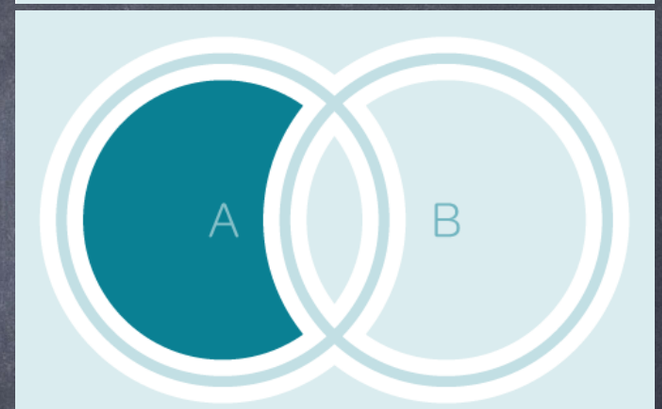
Busqueda de Información en Google Scholar

Boolean Search

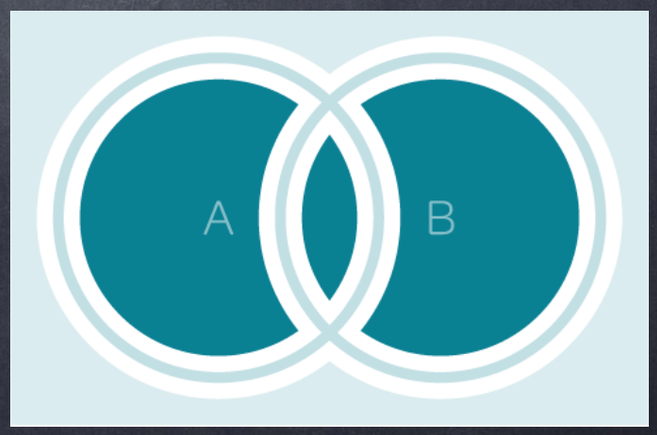
1. Buscar Multiples palabras usar "OR"



2. No incluir ciertas palabras "NOT"



3. Que tenga multiples palabras claves "AND"



4. Palabras compuestas "Lesser Antilles"

https://resources.workable.com/tutorial/source-google-boolean

Demostración en google scholar

Invasive species
Orchidaceae
Caribbean

Recolección de datos

Family	Genus	Species	Author	status	Anguilla	Antigua	Barbados	Dominica	Grenada	Guadeloupe	Martinique	Monserrat	Nevis	Saba	St Eustatius	St Kitts	St Lucia	St Martin	St Vincent	Ref
Acanthaceae	Andrographis	paniculata	(Burm. f.) Wall	alien			X	X	X										X	Ref 1
Acanthaceae	Aphelandra	pulcherrima	(Jacq.) Kunth	alien							X								X	Ref 2
Acanthaceae	Asystasia	gangetica	(L.) T. Anderso	alien			X		X		X	X		X			X		X	Ref 3
Acanthaceae	Avicennia	germinans	(L.) L.	native	X	X	X		X	X	X	X				X	X	X	X	Ref 4
Zygophyllaceae	Tribulus	cistoides	L.	alien		X			X	X	X							X		Ref 4

Una tabla de Excel de 2439 especies en las islas del caribe

Tabla que se añadiría a la sección "suplementaria": Parte del proceso de ética

Datos resumidos

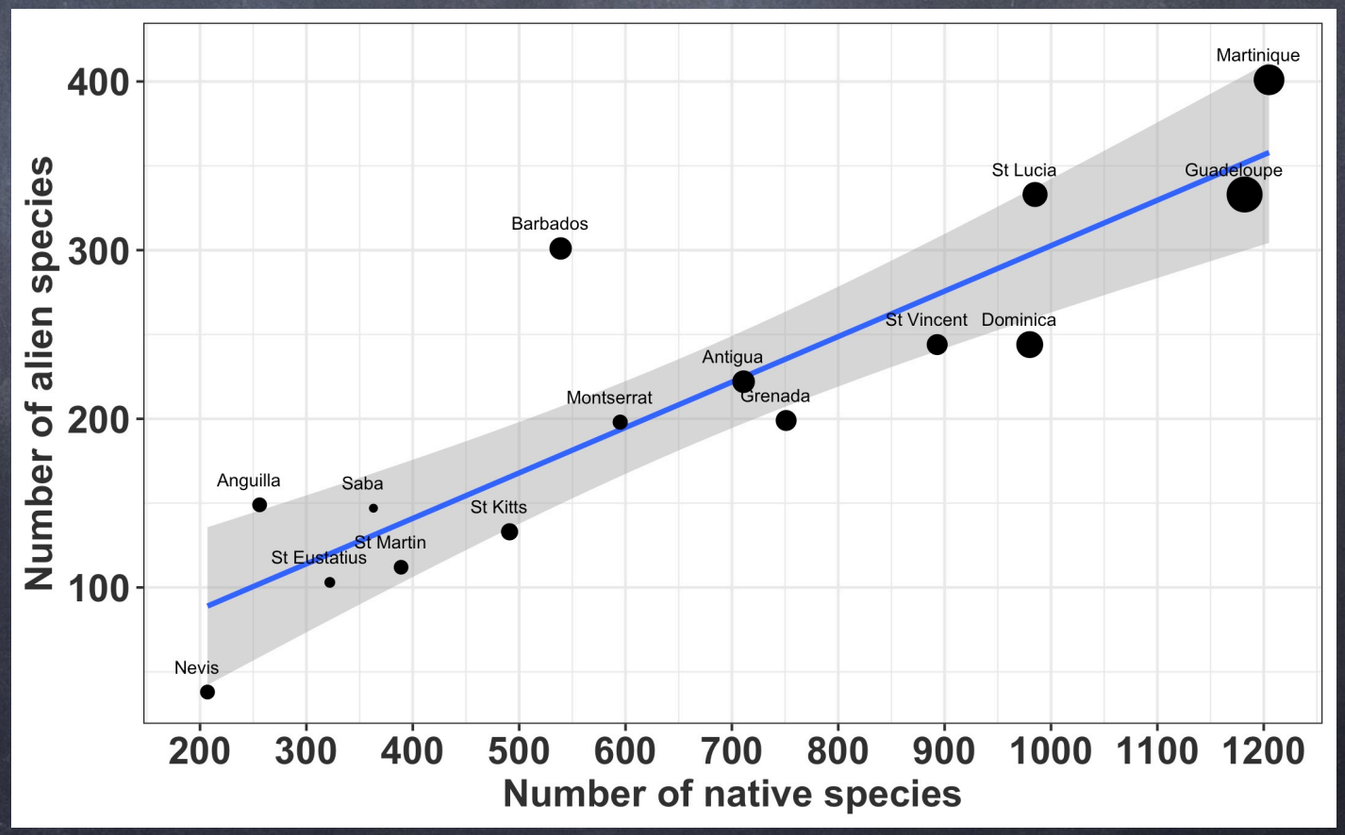
island	native	endemic	alien	native&endemic	total species	area km2	elevation m	latitude	population	pop density	km paved roads	total km roads	airports with paved roads	%agriculture	%forest cover	gdp (billions$)
Anguilla	252	4	77	256	333	91	73	18.2	17,422	191.5	82	93	1	0	61.1	0.1754
Antigua	691	20	222	711	933	442.6	402	17.0747	95,882	216.6	386	1170	2	20.5	22.3	2.393
Barbados	524	15	301	539	840	430	336	13.1939	293,131	681.7	1700	1700	1	32.6	19.4	5.218

Análisis de los datos

Tener claro de los análisis estadístico ANTES de recoger los datos

Comprobar que los supuestos cumple de las pruebas seleccionada

Visualizar los datos



Choose your path!!!!!

- Use Google.doc to work in collaboration with colleagues.

- Go the MS Word way

Spend time thinking about your title

	# citations
• Distribution of life cycle stages in a Lithophytic and epiphytic Orchid.	13
• Lepanthes caritensis, an endangered orchid: no sex, no future?	48
• Are fungi necessary? How fungicides affect growth and survival of the orchid Lepanthes rupestris in the field.	89

Noel Rivera Gómez, RL Tremblay & Elvia Meléndez-Ackerman. **2006.** Folia GeoBotanica **41: 107-120.**
Tremblay, RL **1997**. Selbyana **18**: 160-166.
Bayman, P., *E. González, J. J. Fumero* & RL Tremblay. **2002.** Journal of Ecology. **90:** 1002-1007.

Abstract

- Hit the reader with the most important impact of the paper only (from the first sentence).

The great taxonomic diversity of the Orchidaceae is often attributed to adaptive radiation for specific pollinators driven by selection for outcrossing. However, when one looks beyond the product to the process, the evidence for selection is less than overwhelming. We explore this problem by discussing relevant aspects of orchid biology and asking which aspects of reproduction explain the intricate pollination mechanisms and diversification of this family. We reaffirm that orchids are primarily pollination limited, ...

733

Biol J. Linn Soc. (2005) 84: 1-54.

Evolutionary models estimating phenotypic selection in character size usually assume that the character invariant across reproductive bouts. We show that variation in the size of reproductive traits may be large over multiple events and can influence fitness in organisms where these traits are produced anew each season. With data from populations of two orchid species, Caladenia valida and Tolumnia variegata, we used Bayesian statistics to investigate the effect on the distribution in fitness of individuals when the fitness landscape is not flat and when characters vary across reproductive bouts.

12

Phil. Trans. R. Soc. B (2010) 365, 491–498

Introduction

When writing the introduction stick to the main interesting points.....

Dont go on tangents
Start with the important points!!!!

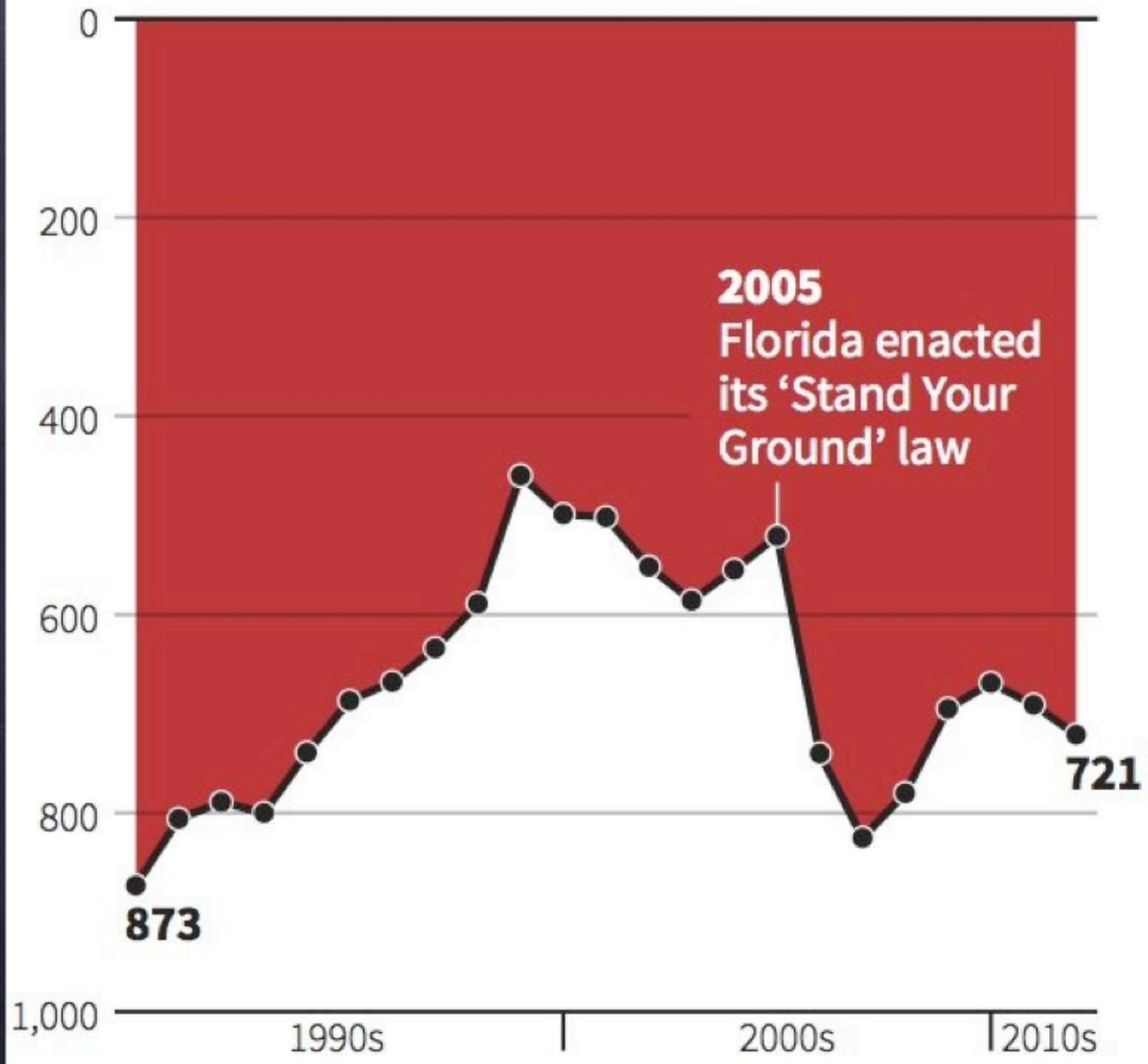
A manuscript is NOT a Dissertation

Figures

- To understand patterns.....
- Or
- To confuse your audience?

Gun deaths in Florida

Number of murders committed using firearms



Source: Florida Department of Law Enforcement

C. Chan 16/02/2014 REUTERS

En qué año hubo mayor asesinatos?

a= 1990

b= 2000

c= 2005

d= 2010

Reuters News

1. Claramente indicar los ejes
2. La leyenda debería incluir toda la información para interpretar el gráfico

Nunca decir al lector de ir al texto para entender un gráfico

Invasive plant species in the West Indies: geographical, ecological, and floristic insights

Julissa Rojas-Sandoval
Raymond L. Tremblay
Pedro Acevedo-Rodríguez
Hilda Díaz-Soltero

Ecology and Evolution
March 2017

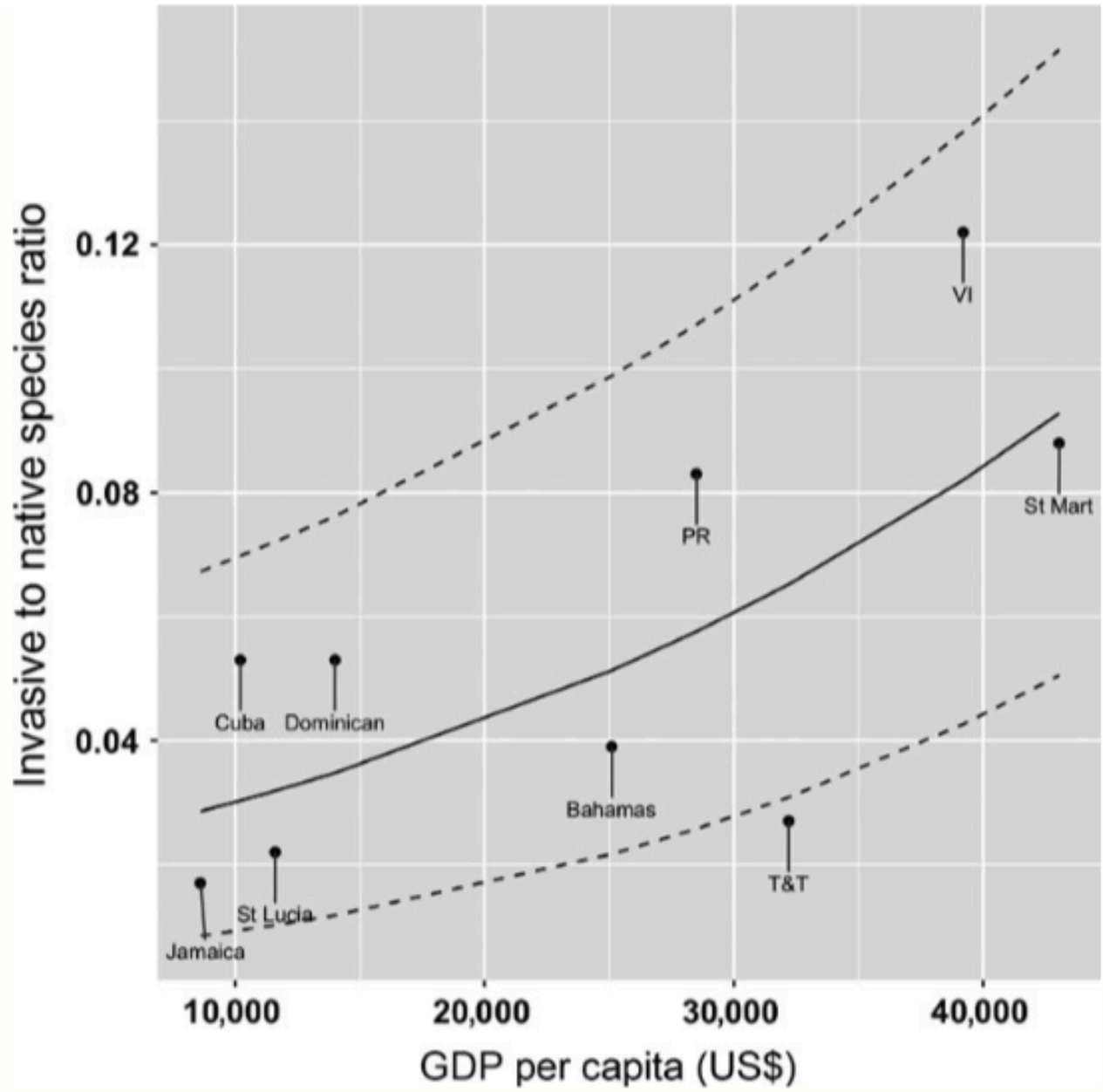


FIGURE 5 Invasive to native species ratio as a function of the gross domestic product (GDP) per capita in US dollars. This is the visualization of the best-fit model predicted by the GLM with beta regression models. The median is indicated by the solid line, and 95% percentile confidence intervals are indicated by dashed lines. T&T, Trinidad and Tobago; VI, Virgin Islands; Dominican, Dominican Republic; PR, Puerto Rico; St Mart, St Martin

Select a perfect senior mentor for guidance

- "Were you raised by wolves?"
- "How did you manage to graduate from such fancy-pants schools if you can't even write a sentence?"

Soy un superhéroe

Voy de fiesta

Eso no esta tan mál

¿Qué pasa aqui? estoy confundido

Necesito media caja de cerveza

Depresión llévame al psiquiátrico

Métodos

Resultados

Minutiae de la metodología

Hipótesis

Rehacer las estadística

Introducción

Discusión

???

Somete manuscrito

Necesito apoyo emocional

Hipótesis
Método
Resultados
Introducción
Discusión

Tiempo .....

Su Plan de acción

- Su Plan
  - Tiempo y Espacio libre de distracción
  - Tener un fecha de terminación (aunque puede cambiar)
- Tener claro su hipótesis
- Recolectar los datos en hoja de Excel, (Recuerda poner todas las refenrencias inmediatamente).
- Un titulo atractivo
- Un abstract que impacta
- Una introducción que anima al lector desde la primera linea
- Tener un mentor que lo motiva y le ayuda con revisión del texto
- Gráficos y Tablas fácil de interpretar