

IPBES invasive alien species assessment, data management report for Chapter 3. Section 3.3.4.3: Climate extremes

Version: 2

DOI: 10.5281/zenodo.5533052

Project leader and contributors:

- Asuka Koyama (asukoyama@affrc.go.jp)

Data curator(s):

- Asuka Koyama (asukoyama@affrc.go.jp)

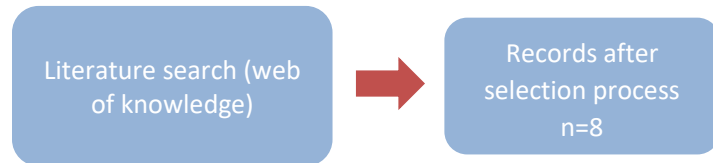
- Ryoko Kawakami (r-kawakami@iges.or.jp)

Description

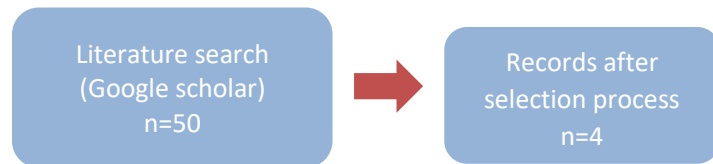
Section 3.3.4.3 assesses the role of extreme events as drivers of biological invasions in Chapter 3 of IPBES thematic assessment of invasive alien species and their control. The experts conducted a systematic review to report on the existing knowledge on this driver. This systematic review consists in the main source of evidence for the section.

Process overview

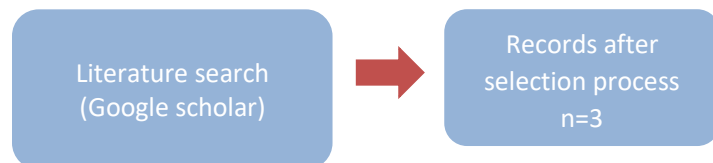
Search 1:



Search 2:



Search 3:



Additional papers added to the selection (experts' knowledge and reviewers' recommendations) n=1

Papers selected for review
 $n=8+4+3+1=16$

Protocol

- **Type of analysis/search/review:** literature review

- **Search language(s):** English

- **Search terms:**

Search 1: (extreme OR episodic) AND climate AND (invasive OR alien OR exotic OR non-native OR non indigenous) AND (review OR "systematic review" OR "meta-analysis" OR "meta analysis" OR "literature review" OR "synthesis" OR "synthesis matrix")

Search 2: (extreme OR episodic) AND climate AND (invasive OR alien OR exotic OR non-native OR non indigenous) AND (review OR "systematic review" OR "meta-analysis" OR "meta analysis" OR "literature review" OR "synthesis" OR "synthesis matrix")

Search 3: (invasive OR alien OR exotic OR non-native OR non indigenous) with some specific keywords (e.g., climate extremes, extreme weather event)

- Search engine:

Search 1: Web of knowledge

Search 2 and 3: Google scholar

- Date:

Search 1: 16 September 2019

Search 2: 17 September 2019

Search 3: 24 September 2019

- Overview of the search results and selection criteria:

Number of search result:

Search 1:8

Search 2:4

Search 3:3

Selection criteria:

Search 1: Searched with above terms, then refined by excluding low relevant papers by experts' knowledge.

Search 2: Searched with above terms, then refined by excluding low relevant papers from Top 50 papers by experts' knowledge.

Search 3: Searched with above terms, then refined by excluding low relevant papers by experts' knowledge.

Number of added papers (experts' knowledge and reviewers' recommendations): 1

- Step by step analysis (methodology, categories, etc.):

Number of papers reviewed: 16 (See [Chapter 3 literature review masterdatabase.xlsx](#))

Fields extracted:

- Publication title

- Year of publication

- Invasion stage [Uptake and transport; Introduction; Establishment; Spread]

- Biomes [Terrestrial; Freshwater; Marine]

- Taxon [Plant; Vertebrate; Invertebrate; Microbes]

- Type of study [Primary study; Review; Meta-analysis]

- Region [Europe and Central Asia; Asia-Pacific; Oceania; Americas; Africa]

- Unit of analysis [IPBES units of analysis]

-Cross-cutting theme [Scenarios and models; indigenous and local knowledge; Good quality of life

-Comment (free text)

- Files (code, review templates, etc.):

[Chapter 3 literature review masterdatabase.xlsx](#)