

# 1ª Reunión del Nodo Iberoamericano de Jardines Botánicos frente al Cambio Climático (NIJAB-CC)

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## Publicaciones

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PARQUES E  
ZOOBOTÂNICA



PREFEITURA  
BELO HORIZONTE



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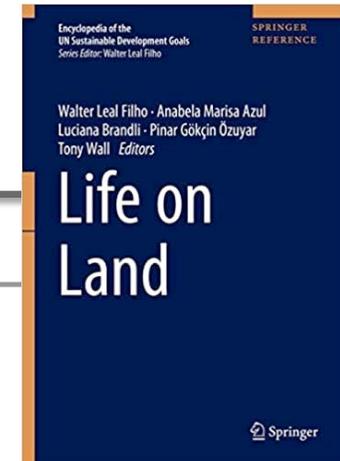
**1ª publicación:** Encyclopedia of the UN Sustainable Development Goals. Life on Land . Edt. Springer

**Otras específicas (Encyclopedia):** Herbarios, Bancos de germoplasma, educación, divulgación.

**Resultados investigación:** *Anales del Jardín Botánico de Madrid*

**Noticias, Reportajes, Entrevistas, etc.:**  
*El Diario del Jardín Botánico*

**Boletín:** BGCI (Botanic Gardens Conservation International)



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## 2 Botanical Gardens Facing 3 Biodiversity Conservation and 4 Climate Change

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## 17 Synonyms

18 Arboretum; Global change; Global warming;  
19 Restoration

## 20 Definitions

21 The role of Botanical Gardens is presented in  
22 its biodiversity conservation and climate change  
23 dimensions in the context of the 2030 Agenda for  
24 Sustainable Development framework (UN 2015).

25 Although gardens date back thousands of years  
26 to China's Zhou dynasty, 1122–249 BCE (Chen  
27 and Sun 2018), the modern concept of a Botanical

Garden originated in Europe; the oldest is the 28  
Orto Botanico di Pisa founded in 1544, which 29  
continues to operate today. Botanical gardens 30  
are public, private, or associative institutions 31  
that maintain collections scientifically ordered of 32  
plants, documented and labeled, for research, but 33  
also for education and recreation (*The Botanic 34  
Gardens Conservation Strategy*, IUCN-BGCS 35  
and WWF 1989). 36

Climate change (CC) refers to changes in 37  
Earth's weather patterns, mainly associated with 38  
changes in Earth's average atmosphere tempera- 39  
ture due to the increase of carbon dioxide (CO<sub>2</sub>) in 40  
the atmosphere (McPherson and Simpson 1999), 41  
but also related to wind and rainfall changes. 42

Phenological events are seasonal activities of 43  
living organisms driven by environmental factors. 44  
Plants, for example, are adapted in mid-latitudes 45  
to a seasonal climate that includes cold-warm 46  
phases and fluctuations of light (Schwartz and 47  
Reiter 2000). As mentioned by Schwartz and 48  
Reiter (2000) phenological events, such as the 49  
first leaf appearance or flower bloom, can serve 50  
as markers to monitor changes in plants resulting 51  
from climate change. 52

Green Infrastructure is defined as the range of 53  
measures that use soils and vegetation to utilize 54  
the natural cycle of the water (e.g., infiltration; 55  
evapotranspiration) to reuse it (Section 502 56  
Clean Water Act, United States Environmental 57  
Protection Agent; [https://www.epa.gov/laws-  
regulations/summary-clean-water-act](https://www.epa.gov/laws-regulations/summary-clean-water-act)). 58  
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W. Leal Filho et al. (eds.), *Life on Land*, Encyclopedia of the UN Sustainable Development Goals,  
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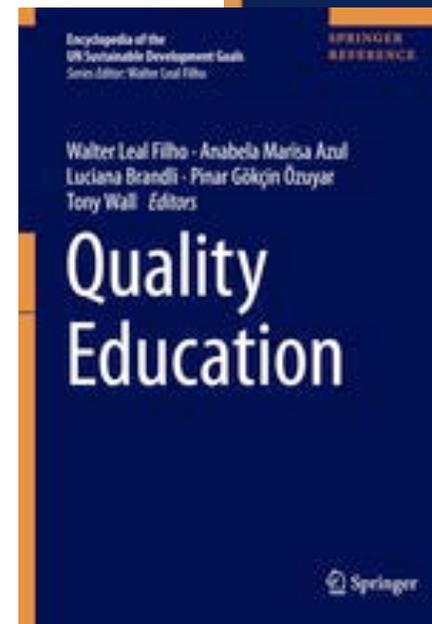
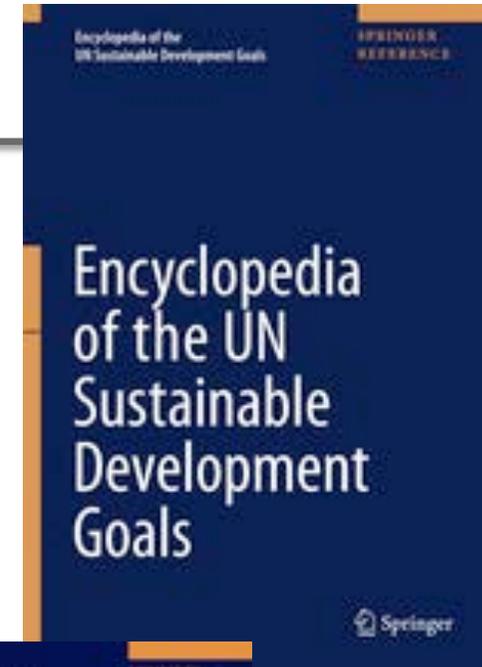
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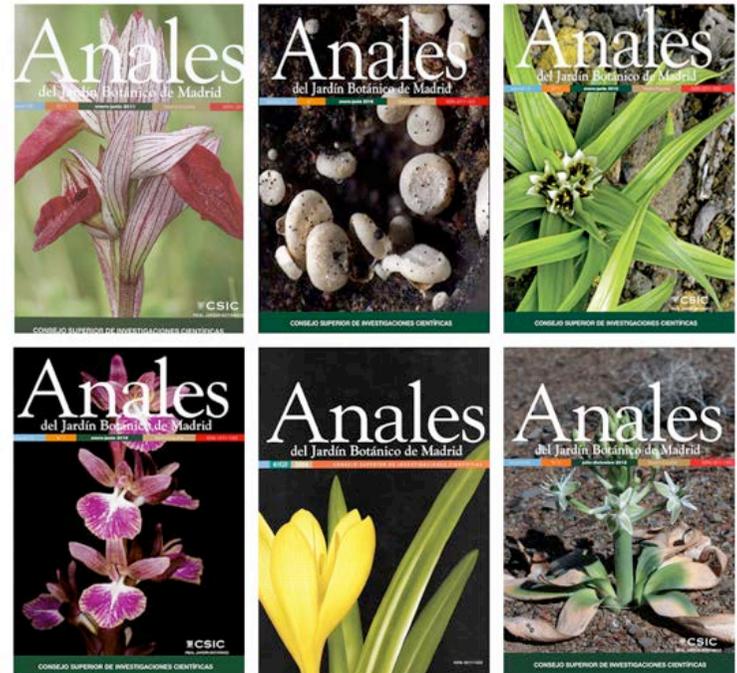
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