



# UNIVERSIDAD DE GRANADA

Departamento de  
Ecología

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- Experimento colaborativo Seeding vs Planting: @seedvsplant



Parcelas de investigación tras el incendio de Las Peñuelas en 2017



Bellota de encina previa a su recolección para un experimento de siembra



Experimento sobre la regeneración de Quercus ante el cambio climático

## Divulgación y Prensa

- Guía para la siembra de bellotas (PDF)
- Dispositivo para proteger bellotas de depredadores en las siembras
- Las sociedades aprenden de los desastres más leves para lidiar con las grandes catástrofes
- Necesidad de planificar reforestaciones para evitar incendios
- Oportunidad para restaurar ecosistemas tras incendios

## Publicaciones

### • 2023

- Lázaro-González A, Tamultaityté G, Castro J, Uscola M, Leverkus AB 2023. Seedling establishment in a deciduous and an evergreen oak under simulated climate change. **For Ecol Manage** 550: 121498. [https://doi.org/10.1016/j.foreco.2023.121498 \(PDF\)](https://doi.org/10.1016/j.foreco.2023.121498)
- Cours J, Bouget C, Barsoum N, Horák J, Le Souchu E, Leverkus AB, Pincebourde S, Thorn S, Sallé A (2023) Surviving in changing forests: abiotic disturbance legacy effects on arthropod communities of temperate forests **Current Forestry Reports** 9: 189-218. <https://doi.org/10.1007/s40725-023-00187-0>
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- Juli Pausas, Leverkus AB, 2023. Disturbance ecology in human societies. **People and Nature** 5: 1082-1093 <https://doi.org/10.1002/pan3.10471>

- Lázaro-González A, Andivia E, Hampe A, Hasegawa S, Marzano R, Santos AMC, Castro J, Leverkus AB. 2023. Revegetation through seeding or planting: A worldwide systematic map. **J Environ Manage** 337:117713 <https://doi.org/10.1016/j.jenvman.2023.117713>
- Molina-Morales M; Leverkus AB; Albaladejo-Robles G; Martínez-Baroja L; Pérez-Camacho L; Villar-Salvador P; Rebollo S; Rey-Benayas JM; Castro J. 2023 Linking animal behaviour and tree recruitment: caching decisions by a scatter hoarder corvid determine seed fate in a Mediterranean agroforestry system. **Journal of Ecology** 111:400–411 <https://doi.org/10.1111/1365-2745.14004>

• 2022

- Leverkus, A.B., Thorn, S., Lindenmayer, D.B., Pausas, J. (2022). Tree planting goals must account for wildfires. **Science** 376:588–9 <https://doi.org/10.1126/science.abp8259>
- Viljur et al. (autor 32/54), 2022. The effect of natural disturbances on forest biodiversity: an ecological synthesis. **Biological Reviews** 97: 1930–1947. <https://doi.org/10.1111/brv.12876>
- Leverkus, A.B. & Castro, J., 2022. Restoration of Mediterranean forest ecosystems after major disturbances: The Lanjarón post-fire experiment over 15 years of succession. In: Zamora R. & Oliva M., eds. The Landscape of Sierra Nevada: A unique laboratory of global processes. **Springer** (ISBN: 978-3-030-94218-2) pp 229–240 ([LINK](#))
- Zamora, R. et al. (author position 4/8) 2022. Concluding notes: Ecosystems of Sierra Nevada in the Anthropocene: a new cocktail of species and ecological interactions. In: Zamora R. & Oliva M., eds. The Landscape of Sierra Nevada: A unique laboratory of global processes. **Springer** (ISBN: 978-3-030-94218-2) pp 307–310

• 2021

- Leverkus, A.B. et al., 2021. Restoring oak forests through direct seeding or planting: Protocol for a continental-scale experiment. **PLoS ONE** 16: e0259552 <https://doi.org/10.1371/journal.pone.0259552>
- Juan-Ovejero et al. (author position 3/5) 2021. Decadal effect of post-fire management treatments on soil carbon and nutrient concentrations in a burnt Mediterranean forest. **For. Eco. Manage.** 498: 119570 <https://doi.org/10.1016/j.foreco.2021.119570>
- Gustafsson L et al. (author position 3/6) 2021. Disturbance interval modulates the starting point for vegetation succession. **Ecology** 102: e03439 doi: <https://doi.org/10.1002/ecy.3439>
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- Martínez-Baroja et al. (posición autor 5/9) 2021. Caching territoriality and site preferences by a scatter-hoarder drive the spatial pattern of seed dispersal and affect seedling emergence. **J. Ecol.** 109: 2342-2353 <https://doi.org/10.1111/1365-2745.13642>
- Gustafsson, L., Granath, G., Nohrstedt, H.Ö., Leverkus, A.B., Johansson, V. (2021) Burn severity and soil chemistry are weak drivers of early vegetation succession following a boreal mega-fire in a production forest landscape. **Journal of Vegetation Science** 32: e12966 <https://doi.org/10.1111/jvs.12966>

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- **Leverkus, A.B.**, Thorn, S., Gustafsson, L. & Lindenmayer, D.B. (2018). Salvage logging in the world's forests: Interactions between natural disturbance and logging need recognition. **Global Ecology and Biogeography** 27:1140-1154 <https://doi.org/10.1111/geb.12772>
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### **Otras publicaciones con revisión por pares (selección)**

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### **Patentes**

- Castro, J., Leverkus, A.B. (Inventores). Protector de semillas ante depredadores. Patente # P201690010, concedida 24/01/2017, país de prioridad: España (con PCT). Explotada comercialmente por Grupo Sylvestris.
- Castro, J., Leverkus, A.B. (Inventores). Protector de semillas ante depredadores. Patente # P201331441, concedida 23/07/2014, país de prioridad: España (con PCT). Explotada comercialmente por Grupo Sylvestris.

## Proyectos de investigación recientes y en curso

- Transición hacia un mayor éxito de revegetación: Implicaciones a gran escala de sembrar o plantar para la restauración ecológica (TED2021-130976B-100). Ministerio de Ciencia e Innovación/ NextGeneration. PI: AB Leverkus.
- Asilvestramiento del almendro: Evolución rápida y dinámica agroecológica (PID2022-143099OB-I00). Ministerio de Ciencia e Innovación. IP: R. Rubio de Casas. 2023-26.
- Avances en la investigación e innovación tecnológica de la dehesa para una gestión adaptada al calentamiento global IN-DE (PP.AVA23.INV2023.30). Convocatoria interna IFAPA para proyectos de líneas estratégicas. Fondos FEDER. 2023-26. 206.572. IP: María Patrocinio González Dugo.
- Plantando cara al fuego 2 (FCT-20-16729). Ministerio de Ciencia e Innovación, Convocatoria de ayudas para el fomento de la cultura científica, tecnológica y de la innovación. IP: A. Merino. 2022-23.
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- Nuevas técnicas para la regeneración asistida de la dehesa II (PP.AVA.AVA2019.004). IFAPA Andalucía/ FEDER. IP: F Navarro Reyes. 2019-2022.

### INFORMACIÓN DE CONTACTO Y DOCENCIA