Pl@ntNet, ten years of automatic plant identification and monitoring

To cite this version:
Alexis Joly, Antoine Affouard, Mathias Chouet, Benjamin Deneu, Joaquim Estopinan, et al.. Pl@ntNet, ten years of automatic plant identification and monitoring. IUCN - Congrès mondial de la nature, IUCN, Sep 2021, Marseille, France. hal-03343235

HAL Id: hal-03343235
https://hal.inrae.fr/hal-03343235
Submitted on 14 Sep 2021

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Pl@ntNet, ten years of automatic plant identification and monitoring [https://plantnet.org/](https://plantnet.org/)

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### Pl@ntNet in a nutshell

- 36K species recognized
- 15M users (last 6 months)
- 700K plants identified/day
- 10M validated obs (GBIF)

- 26 languages
- 200+ countries
- 2.7M accounts
- 12% professionals

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### Research

- **AI-based models for IUCN conservation status prediction (see Fig 1)**
- Digitized Herbarium analysis (phenology, traits, identification)
- Plant disease recognition
- Agro-ecological robots (weeds detection and identification, mixed seeds)
- Biodiversity data quality and uncertainty
- New AI-based services for citizen science (cos4cloud project)

![Fig. 1: Deep species distribution models](image)

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### Use cases

- Natural areas management (e.g. French national parks, Lewa conservancy in Kenya, etc.)
- Educational programs (e.g. 50 schools in Slovakia, 40 in Czechia, 5 in Greece, etc.)
- Early detection of invasive species
- Integration in agro-ecology apps (soil diagnosis, pollinators, biodiversity restoration)
- Industry (trade, gardening, care, tourism, etc.)
- Data-driven research (conservation, agriculture, landscape, climate change, etc.)

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### History

- 1st R&D project
- 1st mobile app (iOS)
- Virtual lab creation
- 1M users
- 1st SDM
- Pl@ntNet in GBIF
- French academy prize

- 2011
- 2012
- 2013
- 2014
- 2015
- 2016
- 2017
- 2018
- 2019
- 2020
- 2021

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### Groups

- Pl@ntNet
- Offline

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