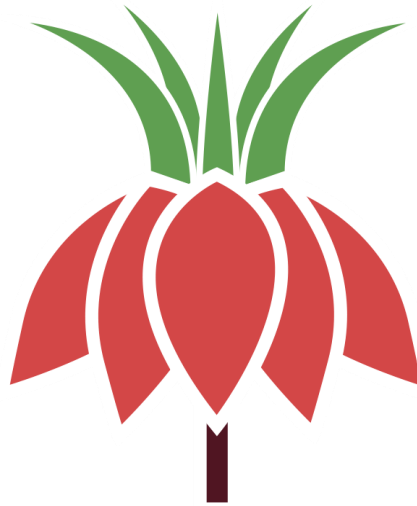


DELECTUS SEMINUM  
*Quae pro mutua commutatione offert*  
HORTUS BOTANICUS PISANUS



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ORTO E MUSEO BOTANICO  
UNIVERSITÀ DI PISA  
1543

**Year 2021**

Orto & Museo Botanico  
Sistema Museale di Ateneo  
Via Luca Ghini 13, I-56126 Pisa  
e-mail: [ortomuseobot@unipi.it](mailto:ortomuseobot@unipi.it)

## BOTANIC GARDEN STAFF

<https://www.ortomuseobot.sma.unipi.it/staff/>

**Director:** Lorenzo Peruzzi

***Index Seminum* Curators:** Marco D'Antraccoli, Francesco Roma-Marzio

**Seed bank management:** Luca Ciampi

**Seed collectors for 2020:** Alice Cecconi, Luca Ciampi, Marco D'Antraccoli, Edoardo Fanucchi, Jacopo Franzoni, Gemma Giannetti, Andrea Giannotti, Michele Gorga, Piero Micheletti, Lorenzo Peruzzi, Silvia Zublena.

## HOW TO READ THE *INDEX SEMINUM*



- **Accession number:** the code to be used in the request form
- **Source of the material:**
  - **W:** seeds collected in the wild
  - **G:** seeds collected in the Botanic Garden. If the gathering was carried out in other Institutions, it is specified between brackets
  - **G(W):** Seeds collected in the Botanic Garden deriving from specimen sampled in the wild
- **Collection data:** information about seed collection (where and when)
- **Additional information:** further notes

## **Pan-European seed list search keyword**

([http://www.botanicgardens.eu/EBG\\_Seed\\_List.pdf](http://www.botanicgardens.eu/EBG_Seed_List.pdf))

seminumsystem2021 - seminumwild2021

## **Taxonomic and nomenclatural notes**

We used the classification of the APG IV for seed plants families. For ferns and allies, we followed PPG I.

For taxa recorded in Italy we followed the taxonomic circumscription adopted by Italian checklists of native and alien flora, respectively.

(<http://dryades.units.it/floritaly/index.php>).

For remaining taxa, most of plants are treated following EURO+MED PLANTBASE (<https://www.emplantbase.org/home.html>), WCSP (phanerogames pro parte; [http://wesp.science.kew.org/prepareChecklist.do?checklist=selected\\_families%40%40350151220200723858](http://wesp.science.kew.org/prepareChecklist.do?checklist=selected_families%40%40350151220200723858)), CFLW (<https://www.worldplants.de/world-ferns/ferns-and-lycophytes-list>), POWO (<http://www.plantsoftheworldonline.org/>) or online databases and generic/familial monographies.

Orthography for authors and Latin names follows IPNI standards.

Along the *Index Seminum*, families are listed in alphabetical order; within each family taxa are listed alphabetically as well.

## **Notes on propagules conservation**

After a drying stage (15 °C, 15 RH), seeds are placed in sealed containers at -20 °C for long term conservation.

## ALISMATACEAE

- 2020-1093 *Alisma plantago-aquatica* L.  
[G; 2019]

## APIACEAE

- 2020-2268 *Sanicula europaea* L.  
[W; between Abetone and Mt. Maiori, Pistoia, Italia, 31 July 2020]

## ASPARAGACEAE

- 2020-0749 *Muscari armeniacum* Leichtlin ex Baker  
[G; 2017]  
2020-0959 *Muscari latifolium* J.Kirk  
[G; 2020]  
2020-0960 *Muscari neglectum* Guss. ex Ten.  
[G; 2017]

## ASPHODELACEAE

- 2020-0962 *Asphodelus macrocarpus* Parl. subsp. *macrocarpus*  
[G(W); Passo Croce, Lucca, 1160 m., 2020]  
2020-0806 *Eremurus himalaicus* Baker  
[G; 2020]

## ASTERACEAE

- 2020-2286 *Carthamus caeruleus* L.  
[W; Tarsia, Cosenza, 3 September 2020]  
2020-2280 *Centaurea aplolepa* Moretti subsp. *subciliata* (DC.) Arcang.  
[W; Rimigliano, Livorno, Italia, 1 September 2020]  
2020-1777 *Centaurea arrigonii* Greuter  
[G(W); Arni, Lucca, 2020]  
2020-2492 *Centaurea deusta* Ten.  
[W; Asciano, Pisa, Italia, 20 September 2019]  
2020-0398 *Cota tinctoria* (L.) J.Gay  
[G; 2020]  
2020-2283 *Klasea flavescens* (L.) Holub subsp. *cichoracea* (L.) Greuter & Wagenitz  
[W; Monte Argentario, Grosseto, August 2020; collected in the *locus classicus*]  
2020-0731 *Leucanthemum ligusticum* Marchetti, Bernardello, Melai & Peruzzi  
[G(W); Rocchetta di Vara, La Spezia, 2020]

## BORAGINACEAE

- 2020-2267 *Moltkia suffruticosa* (L.) Brand subsp. *bigazziana* Peruzzi & Soldano  
[W; Mt. Sagro Alpi Apuane, Massa Carrara, July 2020]

## BRASSICACEAE

- 2020-2282 *Alyssoides utriculata* (L.) Medik. subsp. *utriculata*  
[W; Firenzuola, Sasso di Castro, Firenze, 1 September 2020]
- 2020-2509 *Brassica incana* Ten.  
[W; Mt. Sellaro, Cosenza, 18 August 2019]
- 2020-2483 *Odontarrhena bertolonii* (Desv.) Jord. & Fourr. subsp. *bertolonii*  
[W; Gabbro, Livorno, Italia, 10 July 2018]

## CACTACEAE

- 2020-1874 *Neobuxbaumia polylopha* (DC.) Backeb.  
[G; 2020]

## CALYCANTHACEAE

- 2020-1945 *Chimonanthus praecox* (L.) Link  
[G; 2018]

## CAMPANULACEAE

- 2020-2290 *Campanula medium* L.  
[G(Giardino Botanico Maria Ansaldi Pania di Corfino); 2020]
- 2020-2519 *Musschia wollastonii* Lowe  
[W; Madeira, Portugal, 1 May 2019]

## CAPRIFOLIACEAE

- 2020-2285 *Cephalaria leucantha* Roem. & Schult.  
[W, Frascineto, Cosenza, 1 September 2020]
- 2020-0370 *Lomelosia cretica* (L.) Greuter & Burdet  
[G; 2020]
- 2020-2265 *Lomelosia graminifolia* (L.) Greuter & Burdet subsp. *graminifolia*  
[W; Mt. Sagro, Alpi Apuane, Massa Carrara, July 2020]

## CARYOPHYLLACEAE

- 2020-2500 *Dianthus balbisii* Ser. subsp. *balbisii*  
[W; Colognole, Livorno, Italia, 11 October 2019]
- 2020-1764 *Dianthus seguieri* Vill.  
[W; Pian della Fioba - Orto Botanico "Pellegrini-Ansaldi", 2020]
- 2020-2506 *Petrorhagia prolifera* (L.) P.W.Ball & Heywood  
[W; Massaciuccoli, Lucca, Italia, 6 July 2019]
- 2020-2288 *Saponaria officinalis* L.  
[W; Crati, Cosenza, 28 August 2020]

2020-1053 *Silene canescens* Ten.  
[G; 2020]

#### CISTACEAE

- 2020-2090 *Cistus monspeliensis* L.  
[G(W); San Giuliano Terme, Pisa; 2019, 2020]
- 2020-2023 *Cistus creticus* L. subsp. *eriocephalus* (Viv.) Greuter & Burdet  
[G; 2019]
- 2020-2089 *Cistus salviifolius* L.  
[G; 2019]

#### FABACEAE

- 2020-1318 *Lablab purpureus* (L.) Sweet  
[G; 2019]
- 2020-2484 *Laburnum anagyroides* Medik. subsp. *anagyroides*  
[W; Sassalbo, Massa-Carrara, 9 November 2018]
- 2020-2504 *Lotus rectus* L.  
[W; Massaciuccoli, Lucca, Italia, 6 July 2019]
- 2020-2045 *Medicago arborea* L.  
[G; 2019, 2020]
- 2020-2505 *Trifolium angustifolium* L. subsp. *angustifolium*  
[W; Massaciuccoli, Lucca, Italia, 6 July 2019]
- 2020-1408 *Trigonella officinalis* (L.) Coulot & Rabaute  
[G, 2020]

#### IRIDACEAE

- 2020-0855 *Chasmanthe floribunda* (Salisb.) N.E.Br.  
[G; 2020]
- 2020-0915 *Iris lutescens* Lam.  
[G(W); Le Capanne, San Giuliano Terme, 2020]
- 2020-0916 *Gladiolus italicus* Mill.  
[G; 2020]
- 2020-1521 *Limniris pseudacorus* (L.) Fuss  
[G; 2019]

#### LAMIACEAE

- 2020-2491 *Lavandula stoechas* L. subsp. *stoechas*  
[W; Asciano, Pisa, Italia, 20 September 2019]
- 2020-0473 *Origanum vulgare* L.  
[G; 2020]
- 2020-0649 *Salvia amplexicaulis* Lam.  
[G; 2019]
- 2020-0646 *Salvia argentea* L.

- [G; 2017]  
2020-0696 ***Salvia chrysophylla*** Stapf
- [G; 2017]  
2020-0615 ***Salvia gesneriiflora*** Lindl. & Paxton
- [G; 2017]  
2020-0694 ***Salvia moorcroftiana*** Wall. ex Benth.
- [G; 2020]  
2020-0653 ***Salvia nemorosa*** L.
- [G; 2019]  
2020-2287 ***Salvia officinalis*** L.
- [G; 2020]  
2020-0672 ***Salvia pratensis*** L. subsp. ***bertolonii*** (Vis.) Soó
- [G; 2017]  
2020-0679 ***Salvia radula*** Benth.
- [G; 2019, 2020]  
2020-2499 ***Salvia roscida*** Fernald
- [G; 2017]  
2020-0650 ***Salvia sclarea*** L.
- [G; 2017; 2019]  
2020-2498 ***Salvia spathacea*** Greene
- [G; 2020]  
2020-0692 ***Salvia staminea*** Montbret & Aucher
- [G; 2019]  
2020-0693 ***Salvia tomentosa*** Mill.
- [G; 2019]  
2020-0652 ***Salvia verbenaca*** L.
- [G; 2017]  
2020-0699 ***Salvia yunnanensis*** C.H.Wright
- [G; 2020]  
2020-2392 ***Stachys germanica*** L. subsp. ***germanica***
- [G; 2020]  
2020-2274 ***Teucrium chamaedrys*** L. subsp. ***chamaedrys***  
[W; Pania di Corfino, Lucca, 1.400 m, 15 August 2020]
- 2020-2490 ***Teucrium flavum*** L. subsp. ***flavum***  
[W; Asciano, Pisa, Italia, 20 September 2019]

#### MAGNOLIACEAE

- 2020-0826 ***Magnolia grandiflora*** L.  
[G; 2019; collected from a tree cultivated in the Botanic Garden of Pisa since 1787]

#### MORACEAE

- 2020-2512 ***Ficus elastica*** Roxb. ex Hornem.  
[W; Maracanã, Rio de Janeiro, Brazil, 2 February 2019]

#### ONAGRACEAE

- 2020-2394 *Epilobium hirsutum* L.  
[W; Pian della Fioba - Orto Botanico "Pellegrini-Ansaldi", 2020]

#### PAEONIACEAE

- 2020-2276 *Paeonia officinalis* L. subsp. *officinalis*  
[G(Giardino Botanico Maria Ansaldi Pania di Corfino); 2020]  
2020-2507 *Paeonia peregrina* Mill.  
[W; Mt. Sellaro, Cosenza, Italia, 18 August 2019]

#### PAPAVERACEAE

- 2020-2275 *Glaucium flavum* Crantz  
[W; Tropea, Vibo Valentia, 23 August 2020]

#### PHYTOLACCACEAE

- 2020-2515 *Gallesia integrifolia* (Spreng.) Harms  
[W; Rio de Janeiro, Brazil, 2 February 2019]

#### PLANTAGINACEAE

- 2020-2489 *Antirrhinum latifolium* Mill.  
[W; Asciano, Pisa, Italia, 20 September 2019]  
2020-2462 *Antirrhinum majus* L. subsp. *majus*  
[G; 2019]  
2020-2393 *Digitalis lutea* L.  
[W; Pania di Corfino, Lucca, 1.400 m, 6 September 2020]  
2020-2086 *Globularia bisnagarica* L.  
[G; 2019]  
2020-2277 *Globularia incanescens* Viv.  
[W; Pania di Corfino, Lucca, 1.400 m, 15 August 2020]

#### POLYGALACEAE

- 2020-2520 *Polygala flavescens* DC. subsp. *flavescens*  
[W; Cerbaie hills, Pisa, Italia, 7 May 2015]  
2020-2521 *Polygala flavescens* DC. subsp. *maremmana* (Fiori) Arrigoni  
[W; Monte Argentario, Grosseto, Italia, 6 May 2015, collected in the *locus classicus*]  
2020-2522 *Polygala flavescens* DC. subsp. *pisaurensis* (Caldesi) Arcang  
[W; Fano, Pesaro e Urbino, Italia, 24 May 2015, collected in the *locus classicus*]

#### POLYGONACEAE

- 2020-2289 *Rumex scutatus* L. subsp. *scutatus*  
[W; Pania di Corfino, Lucca, 1.400 m, 15 August 2020]



## RESEDACEAE

- 2020-0391 *Reseda luteola* L.  
[G; 2019]

## ROSACEAE

- 2020-2266 *Dryas octopetala* L. subsp. *octopetala*  
[W; Mt. Sagro Alpi Apuane, Massa Carrara, July 2020]  
2020-2503 *Malus florentina* (Zuccagni) C.K.Schneid.  
[W; Brotalupi, Empoli, Firenze, 28 November 2020]  
2020-2516 *Potentilla pedata* Willd. ex Hornem.  
[W; Gabbro, Livorno, Italia, 11 October 2019]  
2020-2278 *Prunus mahaleb* L. subsp. *mahaleb*  
[W; Pania di Corfino, Lucca, 1.400 m, 15 August 2020]

## RUTACEAE

- 2020-2488 *Ruta chalepensis* L.  
[W; Asciano, Pisa, Italia, 20 September 2019]

## SANTALACEAE

- 2020-2511 *Osyris alba* L.  
[W; Asciano, Pisa, Italia, 20 September 2019]

## SAXIFRAGACEAE

- 2020-2269 *Saxifraga paniculata* Mill.  
[W; Modena, Libro Aperto, 6 August 2020]

## SOLANACEAE

- 2020-0350 *Atropa bella-donna* L.  
[G; 2019]  
2020-0379 *Hyoscyamus albus* L.  
[G; 2020]

## **Before the order - Important Notices**

The responsibility for legal handling of the plant material listed below passes on from the supplier to the recipient upon receipt of the material. The following conditions apply:

1. By ordering seeds from our *Index Seminum* the recipient automatically accepts all requirements as stipulated by the *Convention on Biodiversity* (CBD, Rio Convention) and the *Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity*.
2. The material requested will be used only for public welfare, such as scientific research, species conservation by cultivation, and public education. In the case that scientific publications will be produced based on the supplied plant material, the recipient is obliged to indicate in those publications the origin of the material (the supplying garden and, if known, the country of origin). Even if not mandatory, we expect to be informed and receive an electronic copy of the publication itself.
3. The recipient may transfer the received plant material, its progeny or derivatives only for non-commercial use to bona fide third parties. Such transfer to third parties must be under the terms and conditions of this agreement, and must be documented in a suitable manner.
4. Seeds of CITES Appendix I species will be sent only to CITES-registered institutions, which for this purpose must send us their CITES-registration code together with their seed order. Otherwise, CITES I seeds will not be included in the seed delivery.
5. Only requests from other Botanic Gardens will be processed.



## Request form 2021



Please send the enclosed list of maximum 20 taxa to our mail address [ortomuseobot@unipi.it](mailto:ortomuseobot@unipi.it)

<b>Taxon</b>	<b>Order code</b>

I accept the above 'Important Notices'

<b><i>Signed by:</i></b>	
<b><i>For and on behalf of:</i></b>	
<b><i>Date:</i></b>	
<b><i>Your address</i></b>	

## INDEX OF TAXA

*Achillea ligustica* All.  
*Alisma plantago-aquatica* L.  
*Alyssoides utriculata* (L.) Medik. subsp. ***utriculata***  
*Antirrhinum latifolium* Mill.  
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*Lomelosia graminifolia* (L.) Greuter & Burdet subsp. ***graminifolia***  
*Lotus rectus* L.

*Magnolia grandiflora* L.  
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*Muscari latifolium* J.Kirk  
*Muscari neglectum* Guss. ex Ten.  
*Musschia wollastonii* Lowe  
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*Odontarrhena bertolonii* (Desv.) Jord. & Fourr. subsp. **bertolonii**  
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*Salvia sclarea* L.  
*Salvia spathacea* Greene  
*Salvia staminea* Montbret & Aucher  
*Salvia tomentosa* Mill.  
*Salvia verbenaca* L.  
*Salvia yunnanensis* C.H.Wright  
*Sanicula europaea* L.  
*Saponaria officinalis* L.  
*Saxifraga paniculata* Mill.  
*Silene canescens* Ten.  
*Stachys germanica* L. subsp. **germanica**

***Teucrium chamaedrys*** L. subsp. ***chamaedrys***

***Teucrium flavum*** L. subsp. ***flavum***

***Trifolium angustifolium*** L. subsp. ***angustifolium***

***Trigonella officinalis*** (L.) Coulot & Rabaute