

HYDROPHILIC SEEDS WILL NOT SURVIVE DESSICATION

Some seeds have a high moisture content. If they lose much of this moisture, the embryo inside will die. Even when stored at optimal temperatures, they quickly lose viability. This group is classified as “recalcitrant” (Eric H. Roberts, 1973); Bill Cullina of the New England Wildflower Society introduced the term “hydrophilic” to describe them. Gabriela Costea, an ORG&HPS member who owns BotanyCa, uses the latter term. “Recalcitrant” suggests “obstinate”. In fact, hydrophilic seeds are anything but obstinate. Their embryos are raring to go. In the past, ORG&HPS referred to these seeds as “ephemeral”, but that term causes confusion. “Ephemeral” is rightly applied to those spring-flowering woodland plants which die back shortly after blooming and disappear until the following year. Some of them produce hydrophilic seeds; others do not.

Success in propagating hydrophilic seeds is straightforward. Collect them as soon as they are ripe, then immediately clean and sow them. If you must store them, put them in Ziploc bags in slightly moist vermiculite or peat moss. The medium must be just moist, not wet and one needs to use a fairly roomy bag. In small bags the seeds have the tendency to rot fast perhaps because they lack oxygen. There is no need to spray the seeds with any chemical. The bags should be kept at the same temperature that the seeds would experience out of doors. Keep them warm during summer, coolish towards the fall and then 4°C at the onset of winter. Do not store them in the freezer because the formation of ice crystals will damage cell membranes.



Seed moist-packed in vermiculite photo: Gabriela Costea

DO NOT DONATE ANY HYDROPHILIC SEEDS TO THE SEEDEX!

We are unable to ensure the proper conditions for storage and frigid January temperatures during shipment will kill any remaining embryos.

EXCHANGING HYDROPHILIC SEEDS INFORMALLY

If you are willing to collect and share hydrophilic seed, you will need to plan ahead. Send a list of the species to the Journal editors for publication in the April or May Journal. E-mail journaleditors@onrockgarden.com. Those who want to obtain these seeds should send self-addressed, stamped envelopes, one for each species, to the donor who will ship them as soon as they are ripe. The first of the seeds might be ready early in May, but some species don't mature until

late summer. You can also order many of these species from BotanyCa where they have been collected, stored and evaluated with meticulous care.

HYDROPHILIC SEEDS WHICH ARE NOT ACCEPTED IN THE ANNUAL SEEDEX

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Adonis vernalis
Amaryllis
Anemone nemorosa
Anemone quinquefolia
Anemonopsis
Anthurium
Asarum
Caltha palustris
Caulophyllum
Castanea sativa
Claytonia
Clintonia
Clivia
Coptis trifolia
Dicentra
Dysosma
Eomecon chionantha
Hepatica
Hylomecon vernalis
Jeffersonia
Lindera benzoin
Medeola
Maianthemum
Nerine
Paris quadrifolia
Plagiorhegma
Podophyllums (except
hexandrum)
Ranzania
Sanguinaria
Symplocarpus
Stylophorum
Trillium albidum, grandiflorum
Uvularia