

The Seed Herbarium Image Project®

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The Arboretum's living collection contains more than 15,000 individual plants belonging to more than 9,000 accessions that represent nearly 4,500 taxa. More than one-third of the collection is of plants from known wild origin.

Approximately 40 years ago, Alfred Fordham, propagator at the Arnold Arboretum from 1958 to 1976, began to develop a seed herbarium.

Today, there are 2104 specimens in the seed herbarium, 1878 of which are from accessioned plants found in the living collection. Of the latter, over 472 originate from Arboretum plants of known wild origin.

All images include seed measurements, and reference to the record and accession numbers of the specimen pictured. This information, along with all other plant related information is stored in a BG-Base database.

The images will help nurserymen, horticulturalists, botanical curators, taxonomists, conservationists, ecologists, students, and the public. Botanical institutions and nurseries will have an online tool to verify their collections and inventories. Conservationists will have access to a critical resource in the preservation of plant species.

The 2007 year's grant funded project was focusing upon seeds of *Acer*, *Carya*, *Fagus*, *Stewartia*, *Syringa*, and *Tsuga*. The Arnold's collections of these genera have special "national" status granted by the North American Plant Collections Consortium (NAPCC) of the American Public Gardens Association (APGA).

The projected goal for the present calendar year 2008 will focus on images of seeds of various temperate-zone members of the family Ericaceae.

The Arnold Arboretum's introductions of Ericaceae include *Rhododendron schlippenbachii*, *R. vaseyi*, and *R. mucronulatum*, all plants of importance to ornamental horticulture. The Arnold collection also includes rare and endangered plants such as *Kalmia buxifolium* and *Elliottia racemosa*. Even early introductions of agricultural crops, such as *Vaccinium angustifolium* and *V. corymbosum* are well represented.

Ultimately, the Seed Herbarium Image Project (SHIP) resource will attempt to document the seed morphology of the approximately 1,500 taxa represented by wild-collected accessions at the Arnold Arboretum.

The current image database now includes 842 images. Of these, 434 are edited and "web-ready." We have recently launched the SHIP web pages through two online avenues: (1) the Arboretum website <www.arboretum.harvard.edu> and (2) Plant Collections, a system currently under development at the Chicago Botanical Garden in collaboration with APGA.

SHIP is also made possible through the generous support of the Stanley Smith Horticultural Trust, Cabot Family Charitable Trust, and J. Frank Schmidt Family Charitable Foundation. Kerry Walter of BG-BASE (UK) Ltd., Michael O'Neal of BG-BASE, Inc., and Dr. Martin Pullan of the Royal Botanic Garden Edinburgh participated through the use of their collections information management tool, BG-BASE™.

Figure 1. Seed images of 14 different species (*Abies homolepis* var. *homolepis*, *Acer saccharum*, *A. circinatum*, *A. palmatum* f. *atropurpureum*, *A. palmatum*, *A. pseudosieboldianum*, *Betula occidentalis*, *B. pendula*, *B. pubescens*, *Carpinus caroliniana* var. *virginiana*, *Elliotia racemosa*, *Enkianthus campanulatus*, *Rhododendron vaseyi*, and *Syringa pekinensis*).



