



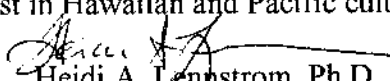
Dear Dr. Brown,

8 July, 2002

I have a keen interest in participation in the Digital Archive Network for Anthropology (DANA) computer imaging project based at North Dakota State University, for the purpose of displaying ethnobotanical materials on the computer. We have a wide variety of plant materials and objects in our cultural and botanical collections that would benefit with wider exposure to the public.

One example of this application is our seed collection. Researchers working in archaeology and paleoecology routinely need good images of seeds from comparative collections for identifications. There are surprisingly few reference books or websites available, and many have black and white photographs that are limited to a single view. Seeds are best viewed from several different angles for identification purposes. The Pacific Paleoethnobotany Facility at Bishop houses over 600 species of native and introduced species from the Hawaiian Islands. A few species are currently shown on our website (<http://www2.bishopmuseum.org/ethnobotanydb/index.asp>), but these photographs are small and give the viewer only a general idea of the seed's appearance. These could be greatly improved by using newer technology that would allow small objects (down to ca. 0.5mm) to be scanned and displayed in three dimensions. Digitizing and displaying our reference collection can be of value of researchers in many places as many of ours are introduced species that may be found other places. Additionally, we have many plant families that are found in other parts of the worlds, and these share characteristics that could be useful elsewhere in identifications to this taxonomic level.

A second application, perhaps more wide-reaching in interest, would be the three-dimensional recording of objects made from plant materials. A large portion of traditional Hawaiian material culture was based on plants. Within our cultural collections are thousands of objects, such as bowls, musical instruments, clothing, fishing implements, surfboards, farming tools, and such that are made from wood, fibers, and seeds. These objects can also be some that are the most fragile and subject to damage by repeated handling and exposure to light, heat, and moisture. As noted for the botanical specimens, objects made from natural materials are unique and it is not always possible to capture all their variability in simple two-dimensional images, the way one might with machine-manufactured objects. The combination of 3D views with accession and interpretive information would be a dynamic and unparalleled resource for people from all walks of life that have an avid interest in Hawaiian and Pacific cultures.


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