# Remedy to Anatomical Discrepancy of Species of Dirca

Cell characteristics of bark tissue of species of *Dirca* will be measured from stained micrographs.  Thirty-three replicates representing the native geographical distribution of *Dirca* palustis, *Dirca* occidentalis and *Dirca decipiens*, and eight replicates representing cultivated plants of *Dirca mexicana* will be analyzed.

Raw data: characteristics measured will follow the score sheet for describing bark characters provided by Hamann et al. (2011).  Data will be recorded with paper and pen and then transfered to excel and saved as Microsoft Excel Worksheet (.xlsx) and Comma-separated values (.csv) files.

Analyzed data: statistical program R will be used for statistical analysis and outputs saved in the form they are generated.

Images: micrographs will be made from stained sectioned tissue mounted on slides.  Images will be saved as TIFF files.  Files will be named as followed: species abbreviation (DP=*palustris*, DO=*occidentalis*, DD=*decipiens*, DM=*mexicana*), magnification, section thickness (Xum [micrometer]), section plane (X=cross-section/transverse, R=radial/longitudial, T=tangential), and date mounted slide was prepared (MM, DD, YY).

Hamann T, Smets E, Lens F. 2011. A comparison of paraffin and resin-based techniques used in bark anatomy. Taxon 60: 841--851.

All data will be recorded with paper and pen and then transfered to excel and saved as Microsoft Excel Worksheet (.xlsx) and Comma-separated values (.csv) files.

Photocopies of paper and pen worksheets will be submitted as an appendix with Ph.D. dissertation.

Micrographs will be uploaded to FigShare with reference in manuscript and saved on the primary investigator's personal computer for personal future uses.

Results will be disseminated in the form of publication in the International Association of Wood Anatomists journal and made open access.

Pre-journal-reviewed manscript will be available as a dissertation chapter archieved within the Iowa State University Library and ProQuest.

The primary investigator, Zachary J. Hudson, is responsible for ensuring the implementation of the data management plan.

Question not answered.