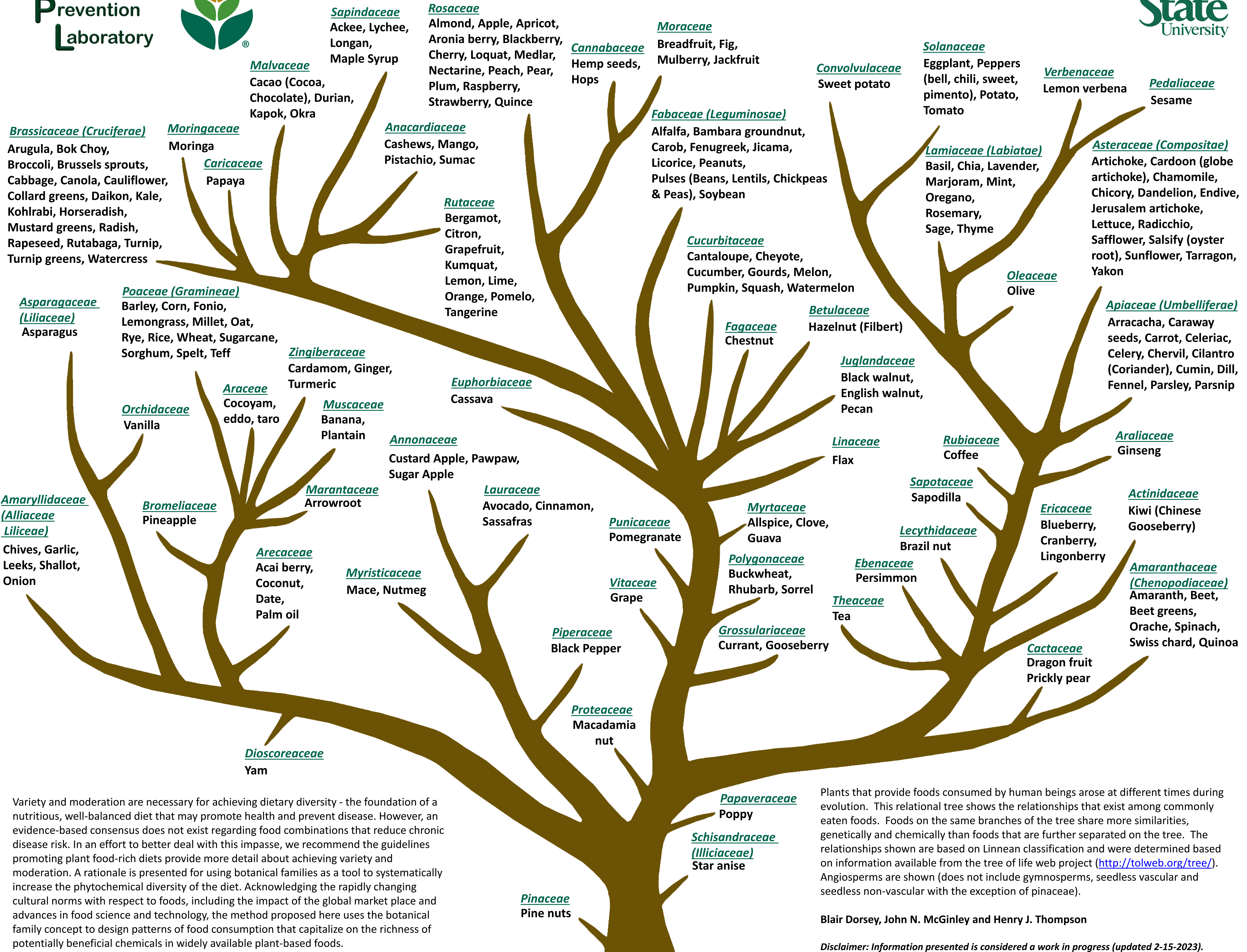


Evolutionary Tree of Plant-Based Foods



Variety and moderation are necessary for achieving dietary diversity - the foundation of a nutritious, well-balanced diet that may promote health and prevent disease. However, an evidence-based consensus does not exist regarding food combinations that reduce chronic disease risk. In an effort to better deal with this impasse, we recommend the guidelines promoting plant food-rich diets provide more detail about achieving variety and moderation. A rationale is presented for using botanical families as a tool to systematically increase the phytochemical diversity of the diet. Acknowledging the rapidly changing cultural norms with respect to foods, including the impact of the global market place and advances in food science and technology, the method proposed here uses the botanical family concept to design patterns of food consumption that capitalize on the richness of potentially beneficial chemicals in widely available plant-based foods.

Plants that provide foods consumed by human beings arose at different times during evolution. This relational tree shows the relationships that exist among commonly eaten foods. Foods on the same branches of the tree share more similarities, genetically and chemically than foods that are further separated on the tree. The relationships shown are based on Linnean classification and were determined based on information available from the tree of life web project (<http://tolweb.org/tree/>). Angiosperms are shown (does not include gymnosperms, seedless vascular and seedless non-vascular with the exception of pinaceae).

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Disclaimer: Information presented is considered a work in progress (updated 2-15-2023).