CHEMISTRY DEPARTMENT
GRADUATE RESEARCH SEMINAR SERIES

Investigation of Phenolic Phytochemicals in Maine Grown Plums

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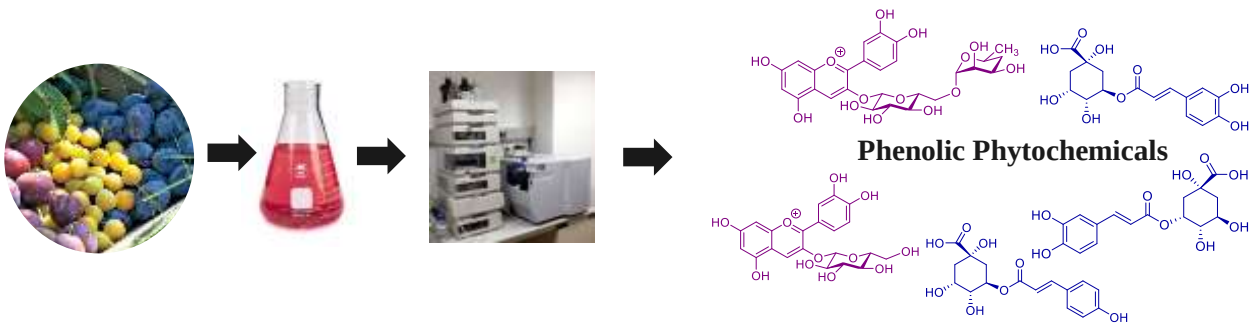
Plums are a rich source of phytochemicals that impart high antioxidant activity and other health benefits.[1] Growing demand for locally-grown produce has led to an interest in plums as a fresh fruit that would be available during peak tourism season in Maine. The goal of this research is to provide qualitative and quantitative analyses of potentially bioactive phenolic components in cold-hardy plums, including Asian, European, and American hybrid varieties. Anthocyanins and hydroxycinnamic acids were extracted and subsequently analyzed using HPLC-UV and HPLC-MS. The phenolic profiles differ significantly between Asian and European varieties, with hybrids having characteristics of both parents. Results show that the profiles and contents of phenolics in plums are dependent on the species, cultivar, ripening stage, and environmental factors.



Reference
1. He, K., Li, X., Chen, X. *J. Ethnopharmacol*. **2011,** 137(3), 1135–1142

Room 316 Aubert Hall @ 11:00 am
Tuesday, March 12, 2019
Light refreshments available