



## **Exploring the Health Benefits and Economic Opportunities of the Bioactive Phytochemicals – A Overview of Phytochemical Research at the University of Missouri Center for Agroforestry**

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**Many of the isolated phytochemicals not have shown strong anti-microbial activities against a wide range of pathogenic bacteria, but also strong inhibitory activities against melanin biosynthesis. Recently, several isolated phytochemicals have been recognized as promising anti-inflammatory, anti-microbial, estrogenic and skin-whitening agents by cosmetic and pharmaceutical industries.**

This research expands beyond elderberry to include species like red cedar. Their research identifies significant commercial potential, which justifies further research into the best cost-effective and environmentally friendly bio-production practices. For elderberry and other dark berry growers, this research demonstrates and explores the potential for extracted ingredients made from naturally occurring compounds in the plants' berries, flowers and leaves.