

University Experimental Extensive Garden



Green roof gardening differs from traditional gardening because of weight restrictions which can determine the amount of soil that can be used. The exposure to wind, sun and other environmental conditions can make roofs a challenging place for plants to grow. Sedum, a plant with the ability to store water in its leaves, is often used on roofs because of its low maintenance and ability to tolerate drought. Dr. Youbin Zheng, the supervisor of the Green Roof Research Program at the University of Guelph, and Katie Vinson, the project lead for this garden, are working to diversify what can be grown on a green roof.

Katie's research involves testing plant varieties, other than sedum, to determine which can survive the demanding growing conditions of green roofs in our Northern climate. She is also testing the ability of these plants to be grown in a mat structure, similar to sod, for easy installation on roofs. Her goal is to determine which plants, familiar to the average gardener, will successfully grow on roofs in our climate. This research has the potential to increase interest in the green roof industry making it more appealing and successful in the long-term.

Biochar, an innovative new technology, is a porous form of charcoal with the ability to retain water and nutrients in the soil. Within the University of Guelph research garden, three plots have been allocated to determine whether adding different concentrations of biochar to the soil has an effect on sedum growth. Lloyd Helferty, of Biochar Ontario, is organizing this small scale research project.