Abstract

Traditional perennial borders require a lot of maintenance and are therefore not so common in public areas in Finland. There is a need for low-maintenance perennial plantings that can tolerate the dry conditions in urban areas. Especially areas close to traffic, such as the middle of roundabouts and traffic islands need easily manageable vegetation and they are therefore normally covered in grass or mass plantings of shrubs. Well-designed plant communities require less maintenance than lawns and are more biodiverse and visually interesting than mass plantings. In the 1990s a Mixed Planting system was developed in Germany, with perennial mixes for public plantings and since then over 30 different mixes have been trialled and tested. The mixes were created for a specific habitat and can be used in different areas with that same habitat. However, the German climate is different from the Finnish and the mixes cannot therefore be used as they are. The Finnish climate is looked into with a focus on urban climate to get an understanding of what is required of a plant to survive in these conditions.

The thesis looks into the difference between traditional horticultural perennial plantings and designed plant communities, such as the German mixed plantings.

In this thesis four of the German perennial mixes are redeveloped to suit urban conditions in Southern Finland. The mixes from the German mixed planting system that were developed further are: Silbersommer (Silver summer), Filigran (Filigree), Präriemorgen (Prairie morning) and Blüttenmosaik (Flower mosaic). The species that are not hardy in the Finnish climate or not available on the market in Finland were substituted for species that are hardy and available. The mixes that were created contain a varying amount of the original species and have been given new names: Kuohu, Kaino, Onni and Kaiho.
Finland has flat plains in the southern and central parts and mountains in the northern parts of the country. Also known as the Land of a Thousand Lakes, 10 percent of the country is covered by inland lakes and rivers. In the latter half of the 20th century Finland converted from an agrarian economy to a diverse and modern manufacturing economy. It is currently among the more affluent nations in Western Europe. Part of the European Union since 1995, Finland was the only Scandinavian country to embrace the Euro at its initiation in January, 1999.

Environmental Issues of Finland. Finland has a...