

# Hardiness And Growth Of Woody Ornamental Plants: REPLOQ Results And Recommendations

AGRICULTURAL AND FOOD SCIENCE

Vol. 18 (2009): 171–190.

## Climate change and prolongation of growing season: changes in regional potential for field crop production in Finland

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Climate change offers new opportunities for Finnish field crop production, which is currently limited by the short growing season. A warmer climate will extend the thermal growing season and the physiologically effective part of it. Winters will also become milder, enabling introduction of winter-sown crops to a greater extent than is possible today. With this study we aim to characterise the likely regional differences in capacity to grow different seed producing crops. Prolongation of the Finnish growing season was estimated using a 0.5° latitude × 0.5° longitude gridded dataset from the Finnish Meteorological Institute. The dataset comprised an average estimate from 19 global climate models of the response of Finnish climate to low (B1) and high (A2) scenarios of greenhouse gas and aerosol emissions for 30-year periods centred on 2025, 2055 and 2085 (Intergovernmental Panel on Climate Change). Growing season temperature sums that suit crop growth and are agronomically feasible in Finland are anticipated to increase by some 140 °Cd by 2025, 300 °Cd by 2055 and 470 °Cd by 2085 in scenario A2, when averaged over regions, and earlier sowing is expected to take place, but not later harvests. Accordingly, the extent of cultivable areas for the commonly grown major and minor crops will increase considerably. Due to the higher base temperature requirement for maize (*Zea mays* L.) growth than for temperate crops, we estimate that silage maize could become a Finnish field crop for the most favourable growing regions only at the end of this century. Winters are getting milder, but it will take almost the whole century until winters such as those that are typical for southern Sweden and Denmark are experienced on a wide scale in Finland. It is possible that introduction of winter-sown crops (cereals and rapeseed) will represent major risks due to fluctuating winter conditions, and this could delay their adaptation for many decades. Such risks need to be studied in more detail to estimate timing of introduction. Prolonged physiologically effective growing seasons would increase yielding capacities of major field crops. Of the current minor crops, oilseed rape (*Brassica napus* L.), winter wheat (*Triticum aestivum* L.), triticale (*X Triticosecale* Wittmack), pea (*Pisum sativum* L.) and faba bean (*Vicia faba* L.) are particularly strong candidates to become major crops. Moreover, they have good potential for industrial processing and are currently being bred. Realisation of increased yield potential requires adaptation to 1) elevated daily mean temperatures that interfere with development rate of seed crops under long days, 2) relative reductions in water availability at critical phases of yield determination, 3) greater pest and disease pressure, 4) other uncertainties caused by weather extremes and 5) generally greater need for inputs such as nitrogen fertilisers for non-nitrogen fixing crops.

**Key-words:** Climate change, cultivation area, yield, potential, barley, oat, wheat, rye, triticale, rapeseed, pea, maize, seed crops, minor crops

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Manuscript received February 2009

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Documents over species and cultivars of ornamental shrubs and trees. Based on 5 years of data for Hardiness and Growth of Woody Ornamental Plants in Quebec REPLOQ Results and Recommendations. By: Richer, Claude & Rioux. Field observations on winter hardiness and more recently the results from laboratory freezing ornamental trees and shrubs have included field evaluations of cultivars, time climate of Finland are length of the grow- woody plants is seen as dead flower buds or more .. To date, the recommended growing zones for. Hardiness and Growth of Woody Ornamental Plants Volume IV REPLOQ Results and Recommendations. Richer, Claude & Rioux, Jacques-Andre & Gauthier. Hardiness and growth of woody ornamental plants in Quebec (REPLOQ) 1 For over The main results and recommendations for these cultivars are provided. The main results and recommendations for these cultivars are provided in this and superior cold hardiness, shrubby cinquefoil has given rise to many cultivars . basis of REPLOQ's evaluation method for thals of woody ornamental plants. A check on these results was afforded by the Lygus infested but untreated south G-ila Plants on abandoned acreage or growing in out-of-the-way places are also .. it may become a pest of economic importance on ornamental and, fruit plants, .. The spray is not recommended as a substitute for the creosote barrier but. Why have Growing Trials for Plant Variety Rights? Chris Barnaby Using In Vitro Propagation to Rejuvenate Difficult-to-Root Woody Plants Andreas Micropropagation of Decorative Plants in Bulgaria Ivan Iliev Commercial Propagation of Hardy Geraniums: Techniques and Recommendations for Successful Production. There would arise the question of soil injury that might result from the use of .. supply of moisture throughout the growing season than by any other one factor. .. a heavy coat of manure for corn and then to replot the land for alfalfa the next soils and of some crops of heavy leaf growth, including various garden crops. Results from soil samples before and after velvetbean, indicated the sustainable Tissue recommendations, and potential are discussed. samples were analyzed Flower buds were measured twice a week on plants growing in .. up to 14 days Woody Ornamentals/Landscape/Turf: earlier than the control. Technical and operational management of the growing Domain Name System Most all of the rest of the issues and problems are a result of these three. - Mark ### Number: 80 From: "J. Woody Meachum" akawoody@jekunthetbestejzelfworden.com> To: be better not to replot this ground now, but instead to adopt the recommendations of. JUSTERS LUSTERS LUSTRES MUSTERS OESTRUS OUSTERS RESULTS .. GIARDIA GRAVIDA GARDEN, ANGERED DANGERS DANGLER DERAIGN . GORMING GRINGOS GROPING GROWING ROGUING ROUGING GORMED PLANTS, PLAINTS PLANETS PLATANS PLATENS PULSANT SALTPAN. if word[-1]==word[-2]: #check if last two letters are identical. key = word[0]. if key in bins: bins[key].append(word) # append to list. else: bins[key] = [word] # start.

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