



NATIONAL AGRICULTURAL VALUE CHAIN DEVELOPMENT PROJECT

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# Pyrethrum Production Niches and Climatic Requirements

## Introduction

These are a range of resources and conditions which enable high yields in the pyrethrum value chain. Production niches of the pyrethrum crop are informed by broad categories of factors. They include; climatic, edaphic and socio-economic factors.

	Climatic factors.	Edaphic/ Soil requirements	Socio Economic Requirements
<p>The diagram illustrates the relationship between different factors and the suitability of the pyrethrum crop. Three boxes at the top represent 'Soil factors', 'Climatic factors', and 'Socio-economic factors'. Arrows from each of these boxes point downwards to a central circle labeled 'Suitability of the pyrethrum crop'.</p>	<p>The average weather conditions of a place that favour the growth and full development of the pyrethrum crop. They comprise:</p> <ul style="list-style-type: none"> <li>• <b>Rainfall and water</b> Pyrethrum crop requires a minimum of 750mm of rainfall well spread over the cropping season.</li> <li>• <b>Altitude</b> Between 1500 up to 3000 is ideal for pyrethrum production. Always choose the right clone/ variety for specific altitudes.</li> <li>• <b>Temperature</b> Should be between 16°C-18°C is important in the process of initiating flowering.</li> <li>• <b>Light aspects</b> such as light intensity, wavelength and duration affect the extent and quality of photosynthesis.</li> </ul>	<p>These are plant requirements derived from the soil environment or the rhizosphere zones of the plant roots.</p> <p>They include:</p> <ul style="list-style-type: none"> <li>• Soil depth and fertility affect rooting and the ability to supply plant nutrients. Soils should be deep and fertile.</li> <li>• Soil pH of between 5.8-6.5 is ideal for pyrethrum production. At optimum pH there is a balance in Macro and Micro elements in soil.</li> <li>• Good soil structure that ensures proper water infiltration so as to prevent waterlogging and soil erosion.</li> <li>• Soil drainage and texture should be good as they affect Aeration and water movement.</li> <li>• Freedom from soil borne pests and diseases.</li> </ul>	<p>These are the factors that influence suitability of an enterprise and emanate from the society. They include:</p> <ul style="list-style-type: none"> <li>• Good Infrastructure provides an enabling environment for farming operations.</li> <li>• Education, adequate research and capacity building.</li> <li>• Good policy frameworks to help cope with problems facing the pyrethrum sub-sector.</li> <li>• Good Markets and marketing plans.</li> <li>• Accessibility to capital resources by farmers.</li> <li>• Human workforce. Young, energetic and resourceful people need to be deployed in extension service provision.</li> </ul>

**Compiled by:** Lagat, R., Obanyi, J.N., Muriithi, I., Pertet, E., Thuo, M., Kimutai, C., Kirigua, V. and Lusike, W.

**Editors:** Nyabundi, K.W., Mukundi, K.T. and Maina, P.

**Design and Layout:** Nogrecia Mnene

**For more information contact:** The Director  
KALRO Molo-Industrial Crops Research Institute

P.O. Box 100-20106, Molo

Kalro.molo@kalro.org

