Global Cassava Production and Agroecosystem Maps

CIAT researchers began working to understand and improve cassava in the 1970's. To support breeding, pest management and economic programs for cassava, the CIAT land use group estimated the geographic distribution of production and classified production areas into similar agroecological regions. The maps are intended to help CIAT and partners to set priorities for cassava research and development.

CIAT acquired cassava production data from agricultural censuses throughout the tropics. Each point on the map represents 1000 hectares planted in cassava. Most of the data is from the late 1980's and the 1990's. The production map should be used to have a general understanding of the geographic distribution of the crop. The data set from which the map was derived has not been checked in detail for errors and inconsistencies.

CIAT researchers developed this cassava climate classification based on decision rules and subjective knowledge of the crop. The primary data source for the map was the CIAT climate database. The FAO soil map was also used to distinguish between acid and non-acid soils (FAO/UNESCO 1974). The classification scheme first depends on the decision rules shown in the accompanying diagram.

The classes have been combined to reduce the 18 classes in the original scheme down to six classes for the final map:

1. Lowland humid tropics (A)
2. Lowland sub-humid tropics (non-acid C, E)
3. Lowland sub-humid tropics (acid C, E and M)
4. Lowland semi-arid tropics (G)
5. Highland tropics (J, L. O, Q)
6. Sub-tropics (B, D, F, H, K, W, N, P)

References and Further Reading

Carter, Simon E. 1986. A note on the distribution of cassava amongst different climate and soil types in South America. Unpublished manuscript. International Center for Tropical Agriculture.

FAO/UNESCO. 1974. Soil Map of the World. Volume 1. UNESCO, Paris.

Jones, P. G., Thornton, P. K. 1999. Fitting a third order Markov rainfall model to interpolated climatic surfaces. Agricultural and Forest Meteorology. 97:213-231.

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Diagram

Mean growing season Temperature	Dry season (months with P< 60 mm)	Daily temperature range	Seasonality (Köppen)
a > 22 °C	1 0-3	1= >10 °C	1 = Isothermic
b < 22 °C	2 4-6	2= < 10 °C	2 = Nonisothermic
	3 7-9		
	4 10-12