

## Poster

### Geographical distribution of knowledge and use of wild leafy greens in Northern Morocco.

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**Introduction.** Knowledge systems link humans to their environment. In the case of wild plant foods, complex and sophisticated traditional knowledge is a prerequisite to continued use and sustainable management. Loss of cultural diversity and traditional knowledge has been compared in importance to the loss of biodiversity for the conservation of the world's ecosystems (Zargger and Stepp 2004). Documentation of traditional knowledge will not be enough to ensure preservation. Because culture and knowledge are dynamic, an understanding of how knowledge is formed and transmitted will also be essential. Knowledge is most frequently acquired by vertical (e.g. from parent to child) and horizontal (e.g. between peers) transmission. Cavalli-Sforza and colleagues (1982) use information about the type of transmission to predict variability in knowledge between and within populations. Here it is proposed that the inverse is also possible, whereby transmission mechanisms can be deduced by examination of geographic distribution of knowledge.

**Objectives.** Document the geographic distribution of use and knowledge of wild leafy greens (WLG) in Northern Morocco. Extrapolate conclusions about the transmission of knowledge from geographic distribution of knowledge, using current theories on the subject.

**Methods.** Information was collected in three villages of Taounate province in the Rif Mountains in Morocco (Sidi Sinoun, Chachia and Izara). Information on the consumption of WLG was collected as part of a modified food frequency questionnaire (FFQ). Knowledge was documented using free listing and analyzed with Anthropac, to generate Multi Dimensional Scales (MDS) of the similarities, differences and clustering of informant's knowledge.

**Results.** Over 80% of households reported WLG consumption in the past 7 days. The MDS produced from free lists indicate knowledge of informants in Izara and Sidi Sinoun are intermixed while those from Chachia form a clearly distinctive cluster.

**Conclusion.** The difference in knowledge in Chachia is likely due to geographical separation, social separation or both. This distribution of knowledge could indicate the high rates of both vertical and horizontal transmission. Izara and Sidi Sinoun use the same markets, which are likely an important location for horizontal transmission between villages. WLG in culinary traditions are important to maintaining ethnic identity. They are important for food security, adequate nutrition and dietary diversity of local populations and are an integral part of the biodiversity of agro-ecosystem, which enhances sustainability, resilience and function. The prevention of further loss of biodiversity and its contribution to human nutrition will require understanding and maintenance of traditional food systems, knowledge, culture and practices surrounding the use of WLG.

Keywords: Transmission of Knowledge, Horizontal Transmission, Nutrition, Food Systems, Free Listing

#### Selected References

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