

CONSTRUCTION OF A NATIONAL HYDROGEN AND OXYGEN ISOSCAPE FOR COLOMBIA AS A BASELINE FOR THE IDENTIFICATION OF REGION OF ORIGIN OF UNIDENTIFIED VICTIMS OF THE INTERNAL ARMED CONFLICT

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SUMMARY

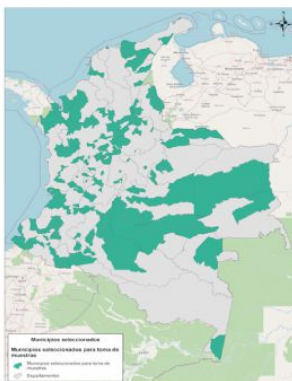
The armed conflict in Colombia generated the forced displacement of thousands of victims, the recruitment of people by illegal armed groups who then were deployed across much of the national territory, and the transport of victims from one region to another, some of whom have died and are unaccounted for. For this reason, it is important to have tools that establish the geographical origin of unidentified persons buried in cemeteries so that this information can help identify a universe of missing persons and locate their potential families.

OBJECTIVE

Constructing a national hydrogen and oxygen isotope reference map for Colombia based on water samples, which will guide both the identification of unidentified persons within the country and contribute to global reference databases.

METHOD

- 1 Selection of cities to be sampled: Samples of drinking water were systematically collected in cities from different regions of the country. The selection criteria included geographic diversity, population density and how severely they were affected by the armed conflict.
- 2 Collection of Samples: Two samples were collected at each location with the help of volunteers from different backgrounds. The collection was carried out via a "sample collection kit" which included the vials, labels, formats and manuals developed for this purpose.
- 3 Transfer of samples to the USA.
- 4 Analysis of the samples: The samples were analyzed by the SIRFER laboratory at the university of Utah.
- 5 Isoscape Construction: Once the processing of the samples has been finalized and the interpretation of the data has been carried out, this information will be sent to the AAAS for the construction of the isoscape in a Geographic Information System (GIS).



SIRFER		Original ID	IR (‰)	OR (‰)	D (‰)
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PARTIAL RESULTS

- 1 232 samples taken in 164 municipalities.
- 2 7 sources of water samples: Tap, river or stream, water storage tank, bottled, ground, water tankers and precipitation. Being tap water the most common one consumed by people.
- 3 36 samples processed for oxygen and hydrogen in the SIRFER laboratories at the university of Utah. 196 are currently being processed.
- 4 We received the help of volunteers from the commission on missing persons of the former FARC guerrilla, which involved the work of over 60 people all over the country.

