

# Mercury pollution from the artisanal gold mining in the La Paz department, Bolivia

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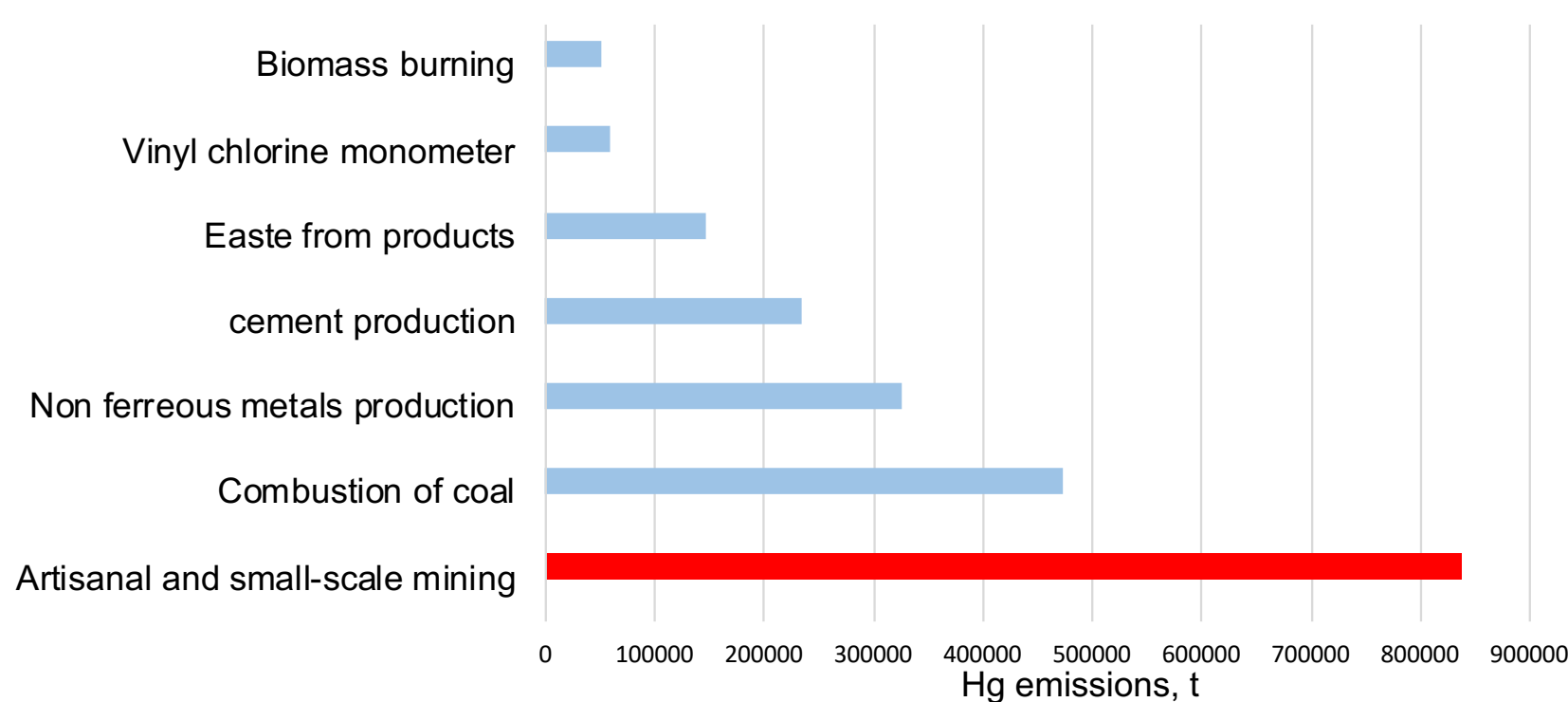
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## Projects

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## Problematic

Bolivia is the only country in South-America that still allows the use and import mercury to use in artisanal gold mining.



**STUDY:** to determine the environmental effects of mercury in the department of La Paz (Bolivia) and to search for possible alternatives to its use for mercury concentration in order to contribute to the abandonment of mercury use.



## Sampling

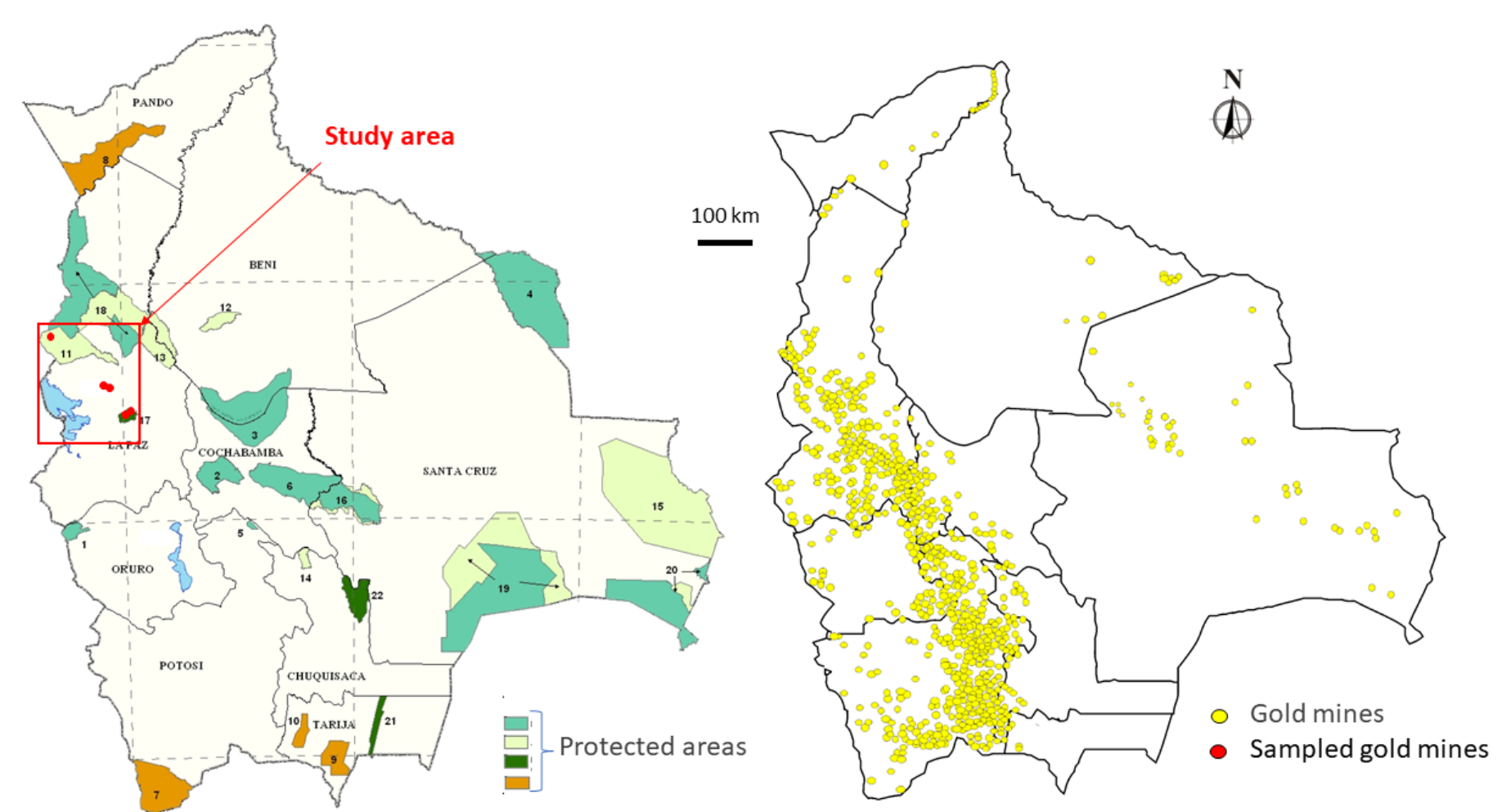
Mine and processing plant

Ore materials  
water,  
Soils  
Sediments

Inhabitants of the communities

Scalp hair

## Materials



## Methods

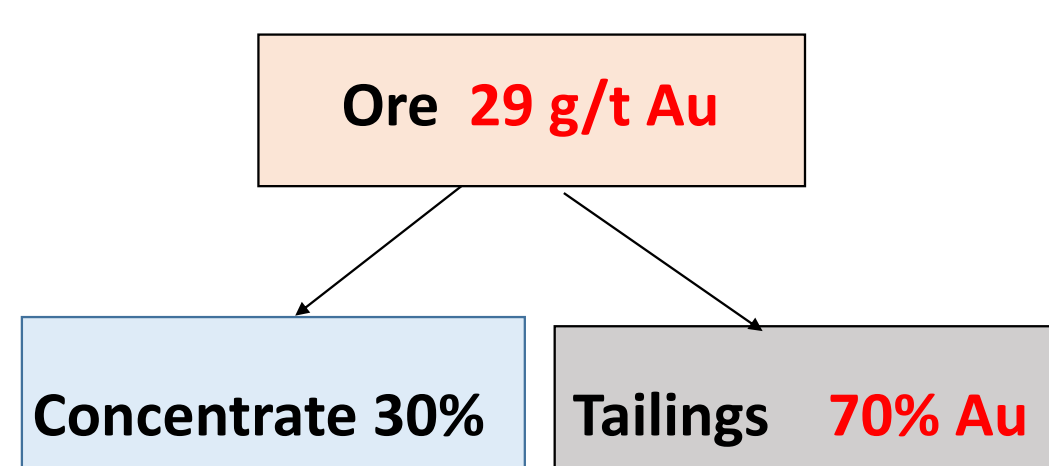
- Chemical composition of ores, processed materials and environment
- Mineralogy of ores and processed materials

Gold content  
Gold distribution  
Gold liberation

Selection of the optimal processing method

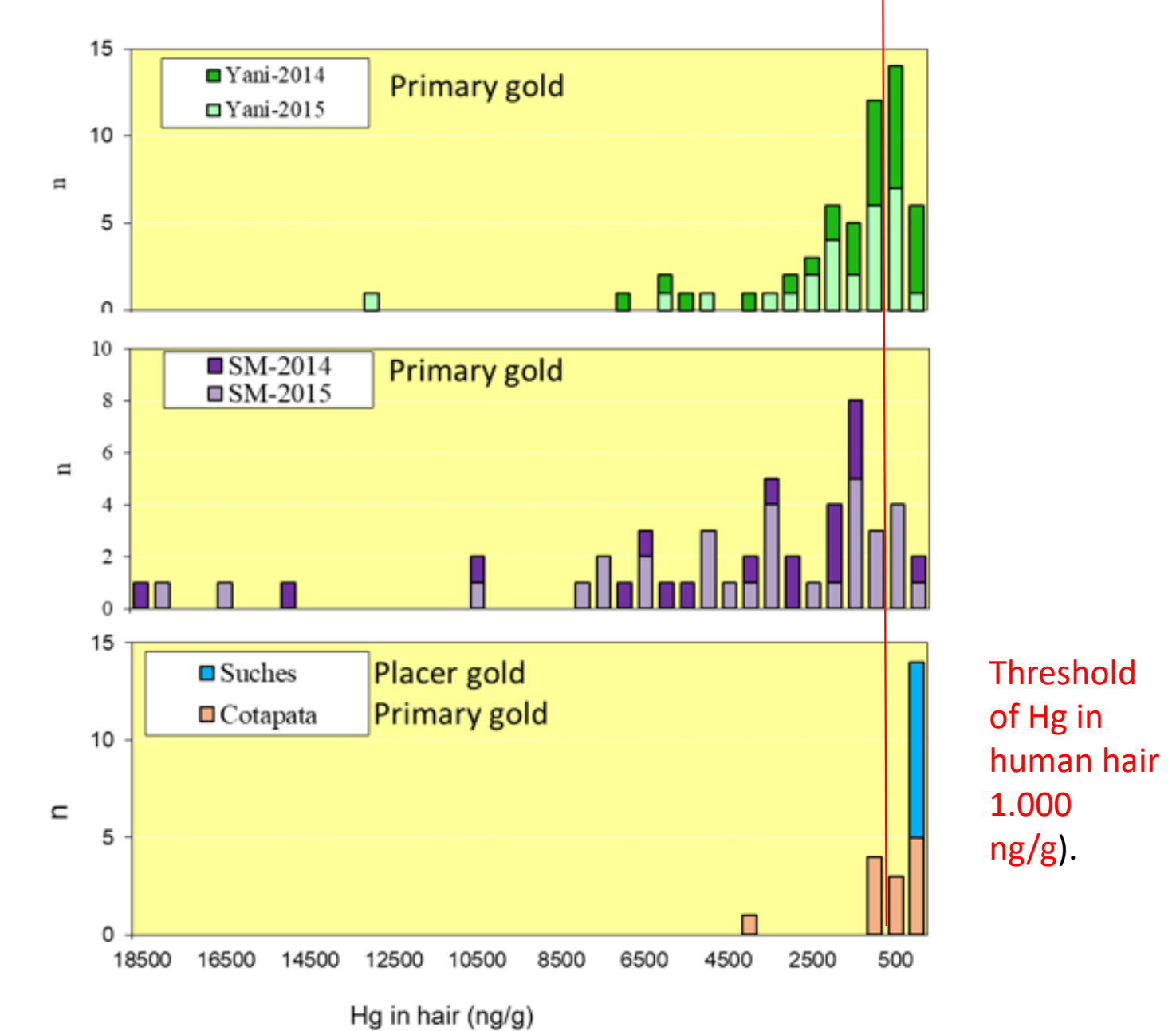
Scalp hair Hg analysed by atomic absorption

## Results and conclusions



Sample	Hg-T (ng/g)
SH-1 Ore from the deposit	11
SH-8 Carpet concentrate	36
SH-9 Tailing to be reprocessed	3428

## Mercury in hair



It is necessary to identify methods to replace the use of mercury.