

## THE BEER MADE OF FOG WATER PRESENTED IN THE PAVILION OF CHILE AT EXPO 2015

The Pavilion of Chile at Expo 2015 has chosen to dedicate a special space for small producers, presenting to visitors products from small-medium enterprises, which have positive and innovative social impacts, from typical alimentary products, handicrafts to books.

The [\*Cerveza Atrapaniebla\*](#) is one of the innovative products promoted by the Chilean Pavilion. The beer, whose name can be literally translated into “fog catcher”, is produced with the water collected from the fog nets, a technology invented by the Chilean physics professor Carlos Espinoza in the 1950s, patented in 1963 and granted by the Catholic University of the North of Chile and then by UNESCO.

Fog collectors [\*Atrapanieblas\*](#) are simple, flat, rectangular nets of nylon. The drops accumulate and grow until they drip into a pipe at the base of the net, from which it flows into a container.

Nowadays, the *Atrapanieblas* are being used in the desert of Atacama in Chile, in Latin American countries (Ecuador, Guatemala, Peru), in Nepal, in the desert of Néguey of Israel, and in some countries of Africa.

The *Atrapanieblas* have also been the solution of a crucial problem for beer production, which requires a large quantity of water. When the brothers Marco and Miguel Carcuro, inventors of the *Atrapaniebla* beer, have decided to produce homemade beer in 2012, they had to face the reality that in the North of Chile there is little and very hard water, with a high content of nitrate.

Actually, the town of Peña Blanca home of the *Atrapaniebla* Brewery, is located in the Atacama Desert, one of the driest deserts in the world. However, the region is often shrouded in a dense fog traditionally called *camanchacas*, from which local flora harvest with little water they need to survive. Here, researchers have been testing the *Atrapanieblas* to collect water from the fog in order to stop desertification and bring water to residents. The tiny brewery has been reaping the benefits from this strategic invention for the territory.



The Marcuro brothers have started their beer production in the agricultural community of Peña Blanca. With a few thousands of euros, they have installed two nets of nearly 30 m<sup>2</sup> on the top of Mountain of Cerro Grande near Peña Blanca. The netting is inexpensive (430 square feet of the stuff would cost around 1000 euros) and has minimal effect on the local ecosystem. Moreover, the collaboration between the brewery and the local community has been very significant to the development of Peña Blanca. The brewery produces now over 6000 bottles of beer per month, it has won an innovation prize in 2013 and its business is getting better and better because the water gives the beer a unique taste and quality.

### To know more

<http://www.atrapaniebla.cl>

<https://www.facebook.com/atrapaniebla>

<http://www.bbc.com/news/world-latin-america-32515558>

<http://www.oei.org.co/sii/entrega5/art07.htm>

[http://www.repubblica.it/ambiente/2015/07/02/news/birra\\_nebbia\\_cile-118147963/](http://www.repubblica.it/ambiente/2015/07/02/news/birra_nebbia_cile-118147963/)

<http://www.ideassonline.org/public/pdf/AtrapanieblasChileENG.pdf>

