

ADASA

WATER AND ENVIRONMENT
TECHNOLOGY



Water Reuse Conference aquaBio

13th June 2016





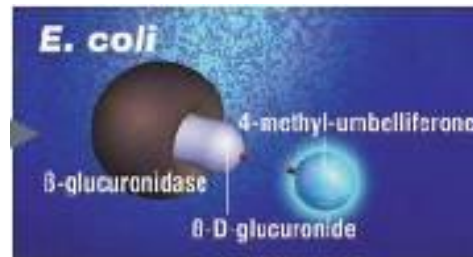
- 25+ Years' Experience in Water & Environment
- 20+ years matching R+D and innovation activities with water sector needs.
- 50 worldwide projects
- and 12 patents

Vision: We strongly believe that **online water quality monitoring** will play an important role in water bodies protection, treatment process efficiency and sanitary safety

<http://www.adasasistemas.com/>

Description

- Continuous measurement equipment for: *Escherichia coli* and total coliforms simultaneously.
- Used technique: Defined Substrate Technology® (DST®) and detection system by measuring fluorescence and absorbance. The bacteria concentration is correlated with the time that the fluorescence and / or color appear.



Operation

- Concentration of bacteria (MPN) between 3h and 12h, in front of the 24h to 96h required for traditional manual sampling + laboratory analysis
- Automated water sampling and reagent dosing, as well as self-cleaning and disinfection processes.
- Maintenance: fortnight reagent replacement and a semi-automatic cleaning is performed each month

Applicability

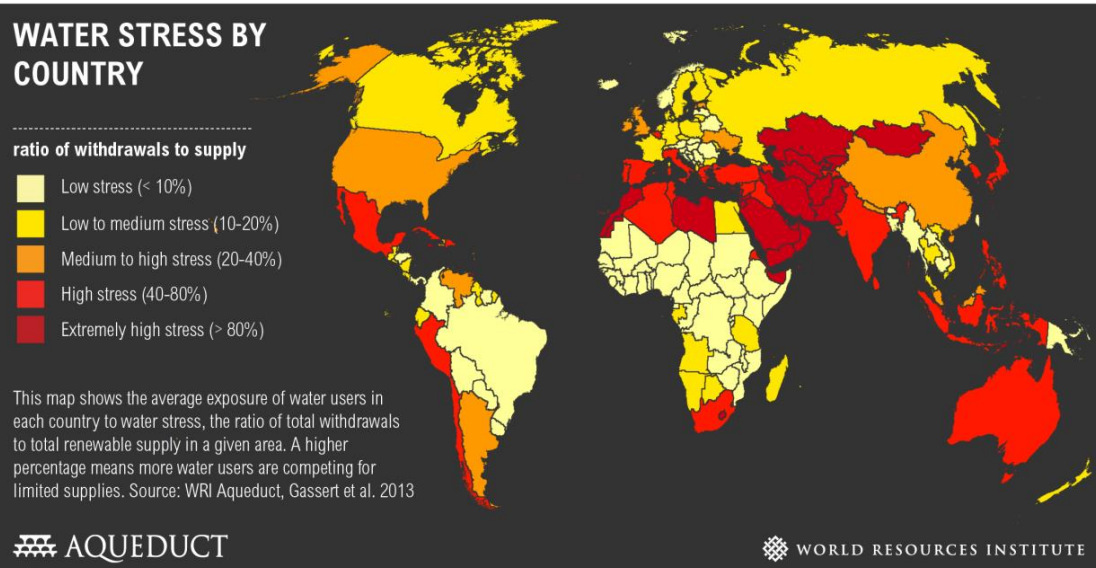
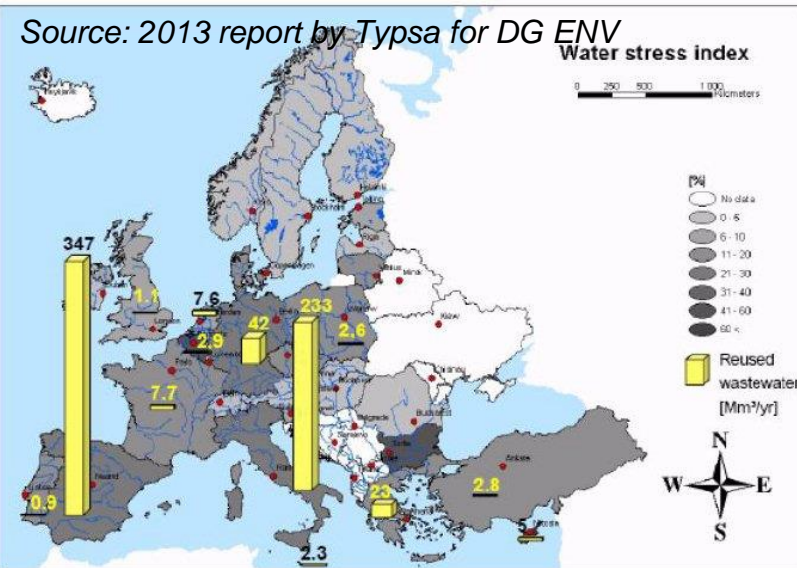
- *E. coli* is a bacteria widely used as an indicator of faecal contamination, as reflected in the Directive 2006/7/EC on the quality of bathing water
- *E. coli* and total coliform parameters are also key indicators for determining the potential uses of reclaimed water from a WWTP tertiary treatment, present in several National Water Reuse regulations (ES, IT, FR, GR, CY, ...)

Benefits

- **Early warning** in case of the water reclamation plant malfunctioning, minimizing pollution events and sanitary risks → **to build confidence in reclaimed water**
- **Efficient production of reclaimed water:**
 - Avoiding overdosing of disinfection chemicals and excess of UV power consumption.
 - Allowing the production of fit-for-purpose reclaimed water, according to the intended water quality for the reuse in irrigation.



Worldwide market potential regarding water reuse = WATER SCARCITY



Other side markets:

- Fishfarms, in particular bivalves
- Opportunities linked to Bathing Directive
- Drinking water, specially in countries without additional chlorination

Technical details: <http://adasaproducts.com/en/portfolio/aquabio/>

Product manager: Montserrat Batlle mbatlle@adasasistemas.com

Demonstration in R3water project:

<http://r3water.eu/techniques-for-reuse-of-water/>



Castell – Platja d’Aro Case Study:

<http://www.ccbgi.org/r3water.php>



Actions to tackle regulatory barriers under RTWQM Action Group:

■ [Water Reuse - An Action Plan within the circular economy](#)

■ <http://www.eip-water.eu/water-reuse>



THANKS FOR YOUR ATTENTION

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