

## ***Vibrio vulnificus* isolated from bivalves in the Spanish mediterranean**

Dolors Furones

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(project INIA RTA 200500079)

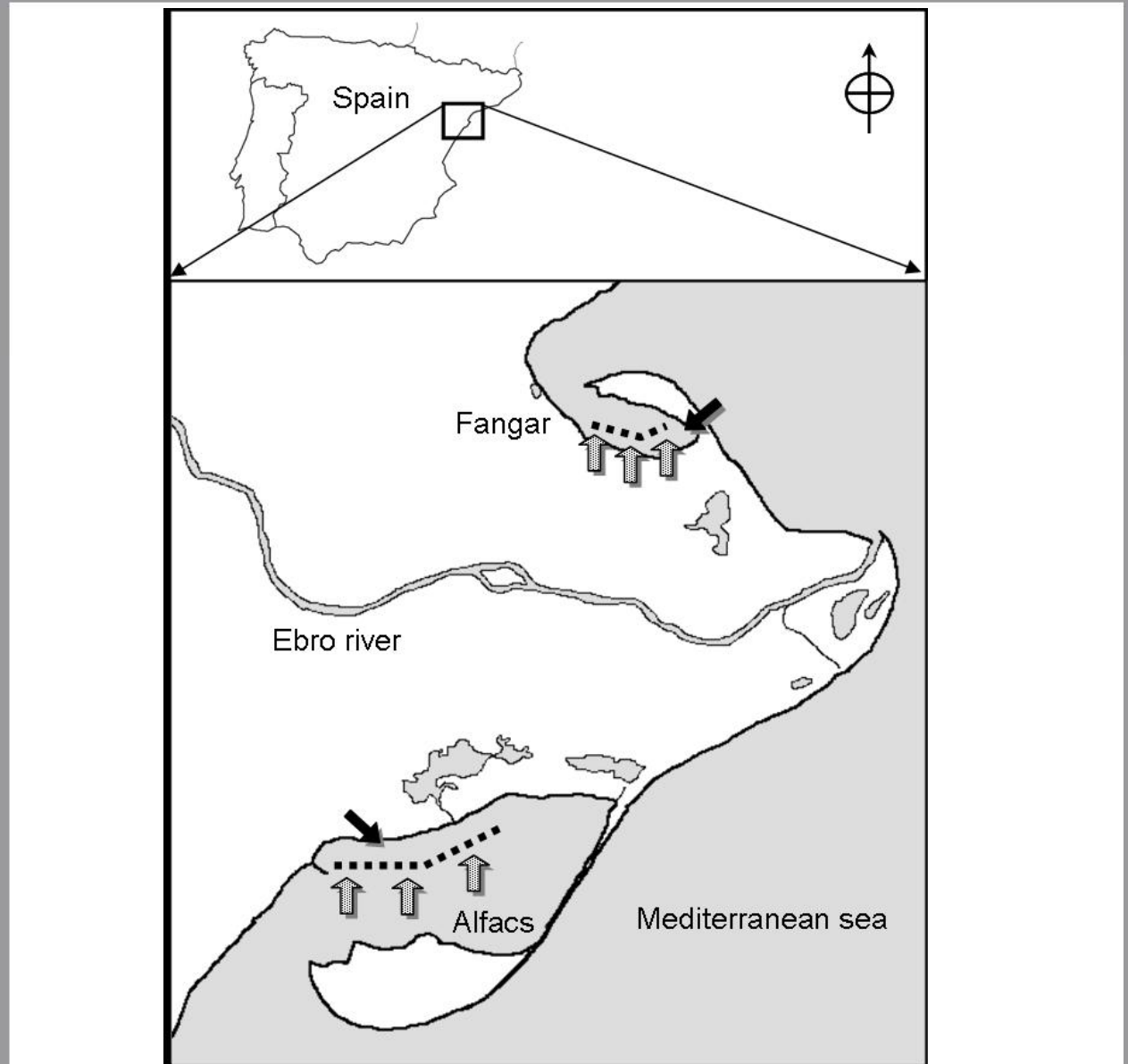
## Opinion of Scientific committee on veterinary measures relating to public health, 2001- on *Vibrio vulnificus* and *Vibrio parahaemolyticus*

- Insufficient data on the incidence of these bacteria
- Increase of international trade and consumption of raw food together with an increasing number of susceptible persons
- Concern on the increment of cases

**Recommendation** – data on pathogenic vibrios in seafood and infections should be considered for inclusion in the Zoonoses Report under the Zoonosis Directive.

**Black arrows- clam fields**

**Grey arrows – sample sites for oyster and mussel**



## Protocol

Isolates acquired from Chromagar-vibrio by plating total individual organism homogenate, incubating overnight at 37°C.

Purification, DNA extraction, PCR with primers proposed by Coleman and co-workers (1996).

254 presumptive *Vibrio vulnificus*, of which 88 confirmed the identity by PCR. These isolates have been characterised further genotypically and phenotypically

Species	Sample date	location	Positives (N)	Organisms (N)
<i>C. gigas</i> -oyster	April 2006	Els Alfacs		60
<i>M. galloprovincialis</i> - mussel	April 2006	Els Alfacs		90
<i>R. decussatus</i> -clam	July 2006	Els Alfacs	6	30
<i>M. galloprovincialis</i> - mussel	July 2006	Els Alfacs	5	67
<i>R. philipinarum</i> - clam	August 2006	El Fangar	3	30
<i>C. gigas</i> -oyster	August 2006	El Fangar		90
<i>M. galloprovincialis</i> - mussel	August 2006	El Fangar		60
<i>C. gigas</i> -oyster	August 2006	Els Alfacs	2	90
<i>M. galloprovincialis</i> - mussel	January 2007	Els Alfacs		59
<i>C. gigas</i> -oyster	February 2007	Els Alfacs		88
<i>M. galloprovincialis</i> - mussel	February 2007	El Fangar	2	90
<i>C. gigas</i> -oyster	February 2007	El Fangar	3	80
<i>M. galloprovincialis</i> - mussel	February 2007	Els Alfacs	2	90
<i>R. decussatus</i> - clam	March 2007	Els Alfacs		30
<i>R. philipinarum</i> - clam	March 2007	El Fangar		30
<i>M. galloprovincialis</i> - mussel	April 2007	El Fangar		90
<i>C. gigas</i> -oyster	April 2007	El Fangar		60
<i>R. decussatus</i> - clam	May 2007	Els Alfacs		30
<i>R. philipinarum</i> - clam	May 2007	El Fangar		30
<i>M. galloprovincialis</i> - mussel	January 2008	Els Alfacs		90
<i>M. galloprovincialis</i> - mussel	March 2008	Els Alfacs	6	90
<i>C. gigas</i> -oyster	April 2008	Els Alfacs	7	60
<i>C. gigas</i> -oyster	July 2008	Els Alfacs	13	88
<i>M. galloprovincialis</i> - mussel	July 2008	Els Alfacs	12	90
<i>C. gigas</i> -oyster	August 2008	El Fangar	7	90
<i>M. galloprovincialis</i> - mussel	August 2008 10/12/2009	El Fangar	10	90
<i>R. decussatus</i> - clam	August 2008	Els Alfacs	6	30
<i>R. philipinarum</i> - clam	August 2008	El Fangar	6	30

## Zoonotic significance of the results

There is a tendency to detect *V. vulnificus* more often in the summer- surveillance efforts should target this season

*Vibrio vulnificus* was detected in all species sampled- no recommendation on indicator species, though oysters can be of bigger concern due to being consumed raw or undercooked.

There is a lack of clinical data available in order to link the presented data with a risk estimation associated to shellfish consumption.