IDEXX Summary   14F

Topic: Publication comparing Pseudalert* versus the ISO 16266 method for the detection of *Pseudomonas aeruginosa* in natural swimming pool water samples

Title: "Bestimmung von Pseudomonas aeruginosa in Schwimm- und Badebeckenwasser mit dem Pseudalert-Verfahren
Besondere Eignung zur Untersuchung von Naturfreibädern?"

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Summary   A new method for detection of *Pseudomonas aeruginosa* in natural swimming pool water is presented as an alternative to the reference procedure DIN EN ISO 16266.

Publication Highlights:

- Pseudalert was compared with the ISO 16266 for the determination of *Pseudomonas aeruginosa* in "natural" untreated swimming pools
    - These samples typically contain a large amount of background flora and, due to the low selectivity of the standard method, require intensive sample processing and several confirmations
    - Depending on the level of background flora, reliable quantification is often not possible and in some cases even the qualitative detection fails

- Bacteria from 255 individual wells from 5 sample trays were isolated on the ISO 16266 selective media and colonies were subsequently confirmed using API20E.

		Pseudalert	
	number	+ve	-ve
ISO 162666	+ve	136	17
	-ve	1	101

		Pseudalert	
	percent	+ve	-ve
ISO 162666	+ve	53.3%	6.7%
	-ve	0.4%	39.6%

- The data generated were used to determine the sensitivity, specificity and efficiency of Pseudalert along with the false-positive and false-negative rate

Sensitivity	88.9%
Specificity	99.0%
Efficiency	92.9%
False-positive rate	0.7%
False-negative rate	14.4%

- The authors suggest that the false-negative rate could be improved by having more experience as users could better identify weak fluorescing wells

- Hard copies of this publication (in German) are available upon request. Please send your request to water@idexx.com with "Request publication 14F" in the subject line