ISO 16140 VALIDATION STUDY OF THE ALOA® ONE DAY METHOD FOR LISTERIA SPECIES DETECTION IN FOODSTUFFS AND ENVIRONMENTAL SAMPLES

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Figure 2: EN ISO 11290-1 Method

ALOA® One Day is a certified method for food samples tested according to ALOA® One. The statistical analysis performed on the 379 species strains (Exclusivity). The specificity of both Methods (ALOA® One Day alternative Method to the NF EN ISO 11290-1) were compared by using 4 target contamination levels (0; 0.25; 0.5, and 1 cells/25 g) in each 2 couples of sample assay was carried out by using 4 target contamination levels (0; 0.25; , 0.5 and 1 cells/25 g) in each 2 lines = presence of +/+ colonies with opaque halo +/+ at (35±1)°C or at (37±1)°C. Incubation for (24±2) hours at (30±1)°C. This selectivity cuts out on costly and time consuming confirmation tests. Relative specificity, relative accuracy and time to detection were tested for both methods.

Material and Method

Method Comparison

- ALOA® One Day alternative method (Fig 2) has been carried out on 379 food and environmental samples including 123 naturally contaminated samples. The different categories tested during this study are described in table 1. The aim of this study was to evaluate the performances of the ALOA® One Day against the ISO11290-1 reference method and to save time and money. Relative accuracy and time to detection were tested for both methods.

- Relative accuracy and time to detection were compared. The ALOA® One Day method shows a similar detection rate as the reference method. These results show very close performances between ALOA® One Day and ISO11290-1 reference method for the detection of Listeria species in foods and environmental samples. The value of the relative accuracy and time to detection were tested for both methods.

- Inclusivity and exclusivity

- These results show very close performances between ALOA® One Day and ISO11290-1 reference method. Relative accuracy and time to detection were tested for both methods.

Results

- Inclusivity and exclusivity

- Detection level

- Conclusion

These results show very close performances between ALOA® One Day and ISO11290-1 reference method. Relative accuracy and time to detection were tested for both methods.

- Table 1: Species considered in the study of this paper

- Table 2: Statistical results of the comparison between ALOA® One Day and ISO11290-1 method

- Table 3: Exclusivity test

- Table 4: Inclusivity test

- Table 5: Species considered in the study of this paper

- Table 6: Statistical results of the comparison between ALOA® One Day and ISO11290-1 method

- Table 7: Time To Results Comparison between ALOA® One Day and ISO11290-1 Method.