7e Symposium du CRIPA

Présentation par affiche (poster)

Detection and Characterization of *Listeria monocytogenes* isolates in porcine slaughterhouse and cutting facilities in Quebec

Neira Kersti[1], Cherifi Tamazight[1], Sylvain Quessy[1,2,3,4], Ann Letellier[1,2,3], Philippe Fravalo[1,2,3]

1 Chaire de recherche en salubrité des viandes (CRSV)
2 Groupe de recherche sur les maladies infectieuses du porc (GREMIP)
3 Faculté de médecine vétérinaire, Université de Montréal; 4 Agence canadienne d'inspection des aliments (ACIA)

Listeria monocytogenes is recognised as a zoonotic foodborne pathogen, its control is focused to the "Ready-to-Eat" food production level, including meat related. After a severe outbreak in 2008, the Canadian regulation (Health Canada 2011) strengthened the production environment surveillance. The industrial sector is focused on the management of *Listeria monocytogenes* risk taking into account previous steps of meat production. Actually, there is few information concerning this pathogen in porcine slaughterhouse and cutting facilities. A better knowledge: detection rate and identification of the *L. monocytogenes* isolates is a pre-requisite to achieve the optimization of the management measures by the industrials. The purpose of this work is to identify sites with residual *L. monocytogenes* contamination in slaughterhouse and meat cutting facilities. To do so, sixteen sampling sites (lairage, pre-evisceration, post-evisceration, refrigeration and cutting area) from 4 plants at 4 occasions distributed in one year were determined. Sample consisted in 900 cm^2 of swabbing surfaces. Detection followed the MFHPB-30 procedure using a chromogenic agar. Strains biochemically confirmed as *L. monocytogenes* were serogrouped by Multiplex PCR procedure (Kerouanton *et al.*, 2010). Currently, six sampling were conducted. From 780 samples analysed 12.30% were *L. monocytogenes* positives (biochemically, prs and prfA as awaited). The first serogroup represented is the type IIa with 47% of the isolates followed by IVa and IIc 20% and 5% for IVb and IIb, respectively. Finally, the majority, 50% (48/96) of *L. monocytogenes* strains, comes from the cutting area, followed for 21% (20/96), 19% (18/96), and 11% (11/96) by refrigeration, animal reception and post evisceration areas, respectively. Further analyses are required to be able to conclude on the strains transition in a plant and during the year.