

First report of the distribution of Locus of Adhesion and Autoaggregation (LAA) pathogenicity island in LEE-negative Shiga toxin-producing *Escherichia coli* isolates from Argentina

Colello, Rocío

Vélez, María Victoria

González, Juliana

Montero, David A.

Bustamante, Ana V.

Del Canto, Felipe

Etcheverría, Analía I.

Vidal, Roberto

Padola, Nora Lía

© 2018 Elsevier Ltd Shiga toxin-producing *Escherichia coli* (STEC) are important foodborne pathogens that can cause severe disease. The ability to adhere to epithelial cells is an important virulence trait and pathogenicity islands (PAIs) play an important role. Recently, researchers identified a member of the Heat-resistant agglutinin family and characterized this antigen named Hemagglutinin from Shiga toxin-producing *E. coli* (Hes). More importantly, they showed that hes and other genes such as iha, pagC and agn43 were integrated in each of the four modules present in the new PAI named Locus of Adhesion and Autoaggregation (LAA) whose presence is associated with severe disease linked to with LEE-negatives STEC. The distribution of LAA among STEC strains isolates from different origins between 2000 and 2015 from cattle, the farm environment, and food and harboring diverse virulence was investigated. The STEC strains were characterized by PCR to detect three modules of LAA and agn43 (as