

ARTÍCULO CIENTÍFICO

TIPIFICACIÓN MOLECULAR DE *Salmonella* AISLADA DE CUYES (*Cavia porcellus*) DE LOJA, ECUADOR.

Casart, Yveth ^{a,b,c*}; Falconí, Mercy ^a

^a AGROCALIDAD, Agencia Ecuatoriana de Aseguramiento de la Calidad – AGROCALIDAD, Laboratorio de Diagnóstico Animal, Km 14^{1/2} Vía Interoceánica, La Granja, MAGAP, Tumbaco, ECUADOR

^b Proyecto Prometeo, Secretaría de Educación Superior, Ciencia, Tecnología e Innovación, Ecuador.

^c Escuela de Nutrición y Dietética, Facultad de Medicina, Universidad Central de Venezuela, Ciudad Universitaria, Caracas, Venezuela.

Ingresado: 30/11/2015

Aceptado: 08/03/2016

MOLECULAR TYPING OF *Salmonella* ISOLATED FROM GUINEA PIGS (*Cavia porcellus*) IN LOJA, ECUADOR.

Abstract

Salmonellosis is a food borne zoonotic disease of primary concern globally. There are thousands of serotypes of the causative agent, the enteric bacteria *Salmonella enterica* subsp. *enterica*. Some serotypes have a broad host range, that include humans; others serotypes are host-restricted and some are species-specific. Molecular typing seeks to identify *Salmonella* serotypes without using antisera. In this work, the usefulness of a multiplex PCR system to identify the serotype of *Salmonella* spp., isolated from organs of guinea pigs with symptomatology compatible with Salmonellosis, was evaluated. The Salmonellosis outbreaks occurred in two farms where guinea pigs were bred under a familiar-system in the Province of Loja. Colonies with typical morphology and biochemistry for *Salmonella* spp. were isolated from intestine, colon, spleen and liver, a result compatible with the septicemic nature of salmonellosis in guinea pigs. All samples tested exhibited the band pattern corresponding to *Salmonella* ser. Typhimurium, a result that was confirmed by serotyping. The advantages of the molecular typing system compared to the conventional serotyping method are discussed.

Keywords: guinea pig, multiplex PCR, salmonellosis, serotype, Typhimurium.

* Casart, Yveth. AGROCALIDAD. Laboratorios de Diagnóstico Animal, Km 14 ½ Vía Interoceánica, La Granja, MAGAP, Tumbaco, Ecuador. Teléfono: +(593) 2 2372844, Ext. 223. e-mail: yvethcasart@yahoo.com