

Área: Ciencias Veterinarias

*Comunicaciones de Investigadores: Medicina veterinaria en fauna silvestre y conservación****Hallazgo de «Amblyomma tigrinum» por medio de vigilancia activa en la región del Pedemonte en Mendoza, Argentina, durante las estaciones más frías del año******«Amblyomma tigrinum» found by active surveillance on the Pedemonte region of Mendoza, Argentina during the colder seasons of the year***Logarzo, Lorena<sup>1,4</sup>; Neira, Gisela<sup>1,3,4</sup>; Godoy, Dayana<sup>1,3,4</sup>; Yamin, Paula<sup>2,4</sup>; Patiño, María Sol<sup>2,4</sup>; Pérez Girabel, Rocío Belén<sup>2,4</sup>; Quintero, Cristian<sup>2,4</sup> y Mera y Sierra, Roberto Luis<sup>1,4</sup><sup>1</sup>Centro de Investigación en Parasitología Regional (CIPAR). Universidad Juan Agustín Maza.<sup>2</sup>Laboratorio de Biología Celular y Molecular (BioCyM). Universidad Juan Agustín Maza<sup>3</sup>Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET).<sup>4</sup>Instituto Argentino de Veterinaria Ambiente y Salud (IAVAS). Universidad Juan Agustín Maza.Contacto: [giselaneira.cipar@gmail.com](mailto:giselaneira.cipar@gmail.com)**Palabras clave:** Amblyomma tigrinum; Otoño-invierno; Ambiente  
**Key Words:** Amblyomma tigrinum; Fall-winter; Environment

Ticks are the most efficient vectors of vector borne diseases after mosquitos. Global and climatic change had increased the spread of these arthropods and the pathogens that they transmit over the world. The relevance of active surveillance of vectors as well as diseases on the animal and human hosts is fundamental for the study of disease epidemiology and hence, prevention. A key for active surveillance of tick borne diseases is tick sampling and identification in hosts but also in the environment. Techniques for environmental sampling of ticks are dragging sampling, which consist on dragging a white cloth to get the ticks along the path. Other methods include carbon dioxide (CO<sub>2</sub>) release from dry ice or from sodium bicarbonate. The aim of this study is to report the use of sodium bicarbonate technique to catch environmental stages of ticks from recently urbanized Pedemonte region of Mendoza, Argentina. From March to July, 2020, traps of CO<sub>2</sub> were used to capture ticks from the environment on the Pedemonte region of Mendoza, Argentina. Traps consist in 2 litre plastic bottles with 4 to five holes at the inferior portion of the bottle. An orifice was performed on the bottle cap to attach a perfusion tube set that released 4 drops per minute of vinegar (3 to 5% of acetic acid on water). A plastic flap was fixed to the upper portion of the bottle to avoid that CO<sub>2</sub> was released too quickly upwards. The traps were placed on the environment over a white piece of cloth or paper and watched for 2 hours to detect the presence of ticks attracted to it. Ticks collected were placed until identification on vials with 70° ethanol. Ticks were identified by means of Gugliemone and Viñabal taxonomic keys. From March to July 2020, 10 samplings were done at 1203 meters above sea level (masl), at a latitude of 32° 51'59" and a longitude of 68°57'14". Two ticks were collected on April. One of them was captured from the clothes of the

researcher that was doing the sampling. One tick was collected on May, also from the clothes of the researcher that was doing the sampling. No ticks were captured on March, June or July. The collected ticks were identified as female adults of «Amblyomma tigrinum». This work is of major relevance to surveillance of ticks in our region, because of the implementation of CO<sub>2</sub> traps with modifications that adapts to the Pedemonte region weather conditions. Also, this recently urbanized area it's an important synantrophic environment that must be actively monitored because of the new proximity of humans and its companion animals to wild environment. The presence of «Amblyomma tigrinum» was expected due to the characteristics of its life cycle that includes wild rodents and birds as hosts of their larval stages and wild and domestic mammals as hosts of its mature faces. It is remarkable the anthropophilia exhibited for two of the tree specimens of «A. tigrinum» found. This attraction to humans has been previously described for the «Amblyomma» genus. The number of ticks found should not be considered low taking into account the high altitude, on the colder seasons associated to temperatures reaching -7°C. Furthermore, this sampling done on autumn and winter is important to comprehend the seasonality of ticks in this region.