(No. 34-2023)

(Approved February 3, 2023)

ANACT

To declare the Purebred Puerto Rican Paso Fino Horse National and Cultural Heritage of Puerto Rico.

STATEMENT OF MOTIVES

Local media recently reported that, on January 12, 2022, the scientific journal "Scientific Reports" published a study, that is the result of RUM graduate student Nikole Ayala's master degree thesis as well as additional research of graduate student Walter Wolfsberger of Oakland University, in Michigan, under the supervision and direction of Dr. Taras K. Oleksyk, assistant professor at the Department of Biological Sciences of Oakland University and adjunct professor at RUM; and Dr. Juan C. Martínez Cruzado, full professor at the Department of Biology of the Mayagüez Campus of the UPR, confirming that the Paso Fino horse originated from the Puerto Rican Criollo (non-purebred) horse, with no genetic contribution from other South American Paso horses. According to the study, the frequency of the mutant allele in the Puerto Rican Criollo horse population is 87.4%.

According to Dr. Juan C. Martínez Cruzado, for the study, they analyzed mitochondrial DNA samples collected from 162 Puerto Rican Criollo horses and 38 Paso Fino horses across the Island and 22,347 variants from genome-wide genotypes from 21 Puerto Rican Criollo horses and 23 Paso Fino horses. The results were compared with data obtained from similar studies conducted all around the world, thus showing that the Puerto Rican Criollo horse has genetic variants found in a great

number of breeds. The study points to the mainly Iberian origins of the Puerto Rican Criollo horse and its close relation to the Andaluz, Lusitano, and Mangalarga Paulista breeds.

Other collaborators of this important study include RUM graduate student Stephanie Castro Márquez and RUM Assistant Professor Dr. Alondra Díaz Lameiro, as well as Dr. Gabriella Lindgren, from the Swedish University of Agricultural Sciences, who made valuable contributions to it. The study was also supported by the Instituto para el Desarrollo del Caballo de Paso Fino, now the Paso Fino Puerto Rico Horse Breed Association (PFBREED), as well as several Paso Fino horse breeders in Puerto Rico.

In addition, the study revealed that the Paso Fino horse originates from the Puerto Rican Criollo horse through an artificial selection process conducted by the local people over the span of centuries. The Paso Fino horse genome is largely dominated by a single component that seems to be almost entirely unique to this breed, a component that it also shares with the Puerto Rican Criollo horse, and that is different from that of the Peruvian Paso and the components found in the Colombian Paso horse.

Dr. Taras K. Oleksyk, from Oakland University, stated that this study "confirms that the Paso Fino breed is a breed native to Puerto Rico rooted in its agricultural tradition. It is a fact that has been documented throughout history and which is now confirmed through a genome-wide analysis. What is surprising is that the Criollo horse is a unique mixture of Puerto Rican horses and a valuable genetic resource that must be studied to better understand the genetics of equine traits such as appearance, behavior, and gait."

Mr. Juan Soldevila, president of the Paso Fino Puerto Rico Horse Breed Association, stated that "once again it is unquestionably established that the Paso Fino horse breed is the only one of its kind and is native to Puerto Rico. PFBREED—an organization that seeks to preserve the Paso Fino horse breed—recognizes this excellent group of scientists from different parts of the world for this revelatory study."

For all of the above, this Legislative Assembly has the responsibility and honor to unequivocally recognize by law the Purebred Puerto Rican Paso Fino Horse as National and Cultural Heritage of Puerto Rico.

BE IT ENACTED BY THE LEGISLATIVE ASSEMBLY OF PUERTO RICO:

Section 1.- Title

This Act shall be known as the "Act to declare the Purebred Puerto Rican Paso Fino Horse National and Cultural Heritage of Puerto Rico."

Section 2.- The Purebred Puerto Rican Paso Fino Horse is hereby declared National and Cultural Heritage of Puerto Rico, as defined in Act No. 169-1988.

Section 3.- The Institute of Puerto Rican Culture, in conjunction with the Department of Agriculture shall draft and disseminate the declaration directed under this Act. Accordingly, the Institute of Puerto Rican Culture may enter into collaboration agreements and partnerships with State agencies and instrumentalities, municipal governments, and relevant private organizations to promote and support it.

Section 4.- This Act shall take effect upon its approval.