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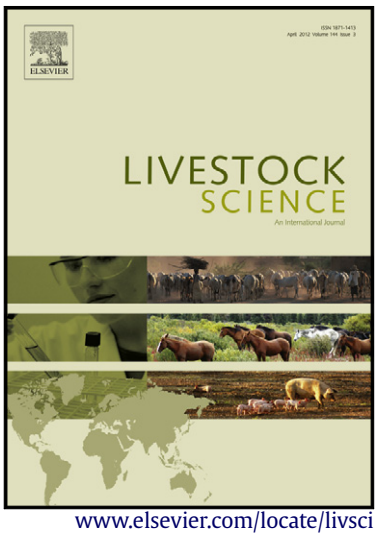


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PII: S1871-1413(14)00300-X
DOI: http://dx.doi.org/10.1016/j.livsci.2014.05.028
Reference: LIVSCI2471

To appear in: *Livestock Science*

Received date: 28 July 2013
Revised date: 24 May 2014
Accepted date: 26 May 2014

Cite this article as: Rodolfo Ramírez-Valverde, Rafael Núñez-Domínguez, Ana L. Palacios-Jiménez, Juan S. Jiménez-Carrasco, Characterization of dairy cattle germplasm used in Mexico with national genetic evaluations in importing and exporting countries, *Livestock Science,* http://dx.doi.org/10.1016/j.livsci.2014.05.028

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# Characterization of dairy cattle germplasm used in Mexico with national genetic evaluations in importing and exporting countries

Rodolfo Ramírez-Valverde[a]*, Rafael Núñez-Domínguez[a], Ana L. Palacios-Jiménez[a], Juan S. Jiménez-Carrasco[a]

[a]Departamento de Zootecnia, Universidad Autónoma Chapingo, Km. 38.5 Carretera México-Texcoco, CP 56230, Chapingo, México.

*Corresponding author. Tel.: +52 595 9543351; fax: +52 595 9521621. E-mail addresses: rodolforv@correo.chapingo.mx, rrv33@hotmail.com (R. Ramírez-Valverde).

**Abstract**

The objective of this study was to characterize and compare predicted transmitted abilities of Brown Swiss and Jersey cattle used in Mexico (MX), and those obtained in the United States (US) and Canada (CA). The database used in this study came from imported American and Canadian Brown Swiss and Jersey germplasm to MX. Currently, these animals are registered in MX and have national genetic evaluations in importing and exporting countries. Means and trends over time of predicted transmitted abilities (PTA) and their reliabilities were computed and compared for the origins of animal groups. Adjusted genetic correlations ($r_g$) between PTAs in paired countries were estimated. The results indicate that importation of germplasm has occurred mainly during the 1990s, and some animals from the exporting countries should not be used in the importing country, if the main selection objective is milk yield. Most Mexican breeders are importing genetic resources below genetic base means (negative PTA values), not only in their countries of origin but also in the importing country, and this suggests that they might not be acquiring genetic material based on the PTA of milk yield or any other genetically evaluated trait. The $r_g$ of animals with evaluations in MX and the US ranged between 0.40 and 0.70;



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