

The three certified breeds of Romanian rabbits and the maximum carrying capacity of the Romanian farmers

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Abstract. Although there were many attempts of the local breeders to create a first Romanian Rabbit breed during the last century, they failed to finish it. Before the 2000's Romania had no certified rabbit breed. All three rabbit breeds produced and certified in Romania so far have been recently created and consolidated: the Transylvanian Giant Rabbit, the Rabbit of Cluj, and the Szekler Rabbit. These three breeds were certified by the National Livestock Production Agency in 2016 and, having in view the present EU legislation, it is debatable if the forms of "homologation" according to the old Romanian legislation are necessary as long as the term "breed homologation" does not exist in the EU legislation. The previous experiences of livestock conservation showed us that large number of breeds and relatively low numbers of breeders can produce populational bottleneck in some breeds, followed by decline and extinction. Therefore, in our opinion three native rabbit breeds are enough for the Romanian rabbit breeders carrying capacity.

Key Words: rabbit breeds, *Oryctolagus cuniculus*, Romanian breeds, ANZ, Entente Européenne.

Introduction. Although there were numerous attempts of the breeders to create a Romanian Rabbit breed during the last century, before the 2000's Romania had no certified rabbit breed. All three rabbit breeds produced and certified in Romania so far have been recently created and consolidated (Petrescu-Mag et al 2009; Botha et al 2011; Botha et al 2015) (Table 1).

Three Romanian Rabbit Breeds. The first breed created, with a significant number of broodstock and already well known among the Romanian Rabbit breeders, is the Transylvanian Giant Rabbit (TGR) (Petrescu-Mag et al 2011, 2012, 2014a,b). It was roughly described in the scientific literature for the first time in 2009 (Petrescu-Mag et al 2009) and it was awarded three titles of European Champion (one of them at Leipzig, 2012, and the other two at Metz, 2015). Besides, the breed was presented in several tens of national exhibitions, but also in exhibitions held in Hungary and Serbia. The most important aspect is that this breed was characterized from the morphological, productive and reproductive points of view, and these outcomes were published in a scientific work (Petrescu-Mag et al 2014a), although there are many aspects which could be further investigated (Oroian et al 2016; Gradinaru 2017; Gradinaru & Petrescu-Mag 2017).

The second breed presented, the Cluj Rabbit (RC) (Botha et al 2013), should have been the first. The project of creation of the Cluj Rabbit started earlier (2005) than the TGR project (2008), but the spread and consolidation was slower than it happened in the case of TGR. Although the Cluj Rabbit was presented in many exhibitions in the country and abroad, it still needs more farmers to be involved.

The last breed, but no less important, is the Szekler Rabbit (SR) (Botha et al 2016), which is largely spread in Romania and in Hungary. A near future mandatory target will be the breed presentation at the European Exhibition – Herning, Denmark, 9-

11th of November, 2018 (see Annex 1). Actually, all three breeds will be prepared for this special event, which is the greatest of this kind in Europe.

Table 1

The national and international recognition of Romanian rabbit breeds

Romanian rabbit breed	The project start year	Published in literature	Sporadic individuals presented in exhibitions	Internationally recognized by the EE* (standardized)	Attested in the records of ANZ* (ANZ certified)
Rabbit of Cluj Transylvanian	2005	2011	2010	Metz, 2015	2016
Giant	2008	2009	2011	Leipzig, 2012	2016
Szekler Rabbit	2010	2015	2014	In progress	2016

*EE - Entente Européenne d'Aviculture et de Cuniculture; **ANZ - National Livestock Production Agency (Agenția Națională pentru Zootehnie „Prof. dr. G. K. Constantinescu”).

These three breeds presented above were certified by ANZ (National Livestock Production Agency - Agenția Națională pentru Zootehnie „Prof. dr. G. K. Constantinescu”) (Ilyes et al 2016) (see Annexes 2-4) and, having in view the in force EU legislation (Regulamentul privind ameliorarea animalelor), at present (2017), it is debatable if the forms of “homologation” according to the old Romanian legislation are necessary as long as the term “breed homologation” does not exist in the EU legislation.

Rabbit Farming in Romania. If the Western, Northern or Central European countries have developed systems for intensive rabbit meat production, in Romania most of the rabbits are produced in backyard farming systems (Blaga & Burny 2014). Such small farms can host 5-500 individuals and most part of their production is consumed within households, while a small number of individuals is sold as broodstock to other breeders. Missing of substantial subvention makes the Romanian farms non-competitive in terms of meat production. Therefore, the rabbit meat from the Romanian market originates from abroad. On the other side, small scale farming specific to Romania promotes animal diversity, exhibition, hobby, and fashion.

Compared to the intensive systems of rabbit farming which produce mostly hybrids, Romanian systems hold small numbers of animals and produce mostly pure breed animals. Competitive Romanian breeders are affiliated to the National Federation of the Pigeon, Poultry and Small Animal Breeders from Romania (Federația Națională a Crescătorilor de Porumbei, Păsări și Animale Mici din România, FNCPPAMR). This federation comprises 36 associations and 729 breeders, among which one third are rabbit breeders.

The Maximum Carrying Capacity of the Romanian Rabbit Breeders. The previous experiences showed us that large number of breeds and relatively low numbers of breeders can produce populational bottleneck in some breeds, followed by decline and extinction. For instance, Romania has more than 40 pigeon breeds, among which more than ten breeds need reconstruction and consolidation due to bottleneck.

On the one side, the bottleneck can often be accompanied by genetic drift and this radically change over time some phenotypes of the old breed. On the other side, after the bottleneck period, the population becomes scarce in variability, another negative effect which affects the health and the productivity of the breed. This is not the case of the three Romanian rabbit breeds, but it may happen in future. The number of rabbit breeds is not yet too high and, paradoxically, this is a good thing.

In order to maintain a vigorous breed over decades, the population must have elevated numbers of animals all the time, the population should be spread geographically, while the numbers of breeders should be high enough. In our opinion three native rabbit breeds are enough for the Romanian rabbit breeders carrying capacity.

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EUROPASCHAU HERNING 2018



29. EE-EUROPAUDSTILLING 29. EE-EUROPASCHAU

5. EE-Ungdomsudstilling for fjerkræ, duer, kaniner, marsvin og fugle
5. EE-Europajugendschau für Geflügel, Tauben, Kaninchen, Cavia und Vögel

fra 9.-11. november 2018
vom 9.-11. November 2018

i MCH Messecenter Herning – Danmark
in MCH Messecenter Herning – Dänemark

Åbningstider / Öffnung

Fredag / Freitag	9.11.18	kl. 11-18
Lørdag / Samstag	10.11.18	kl. 8-18
Søndag / Sonntag	11.11.18	kl. 8-14



ROMANIA



**MINISTERUL AGRICULTURII ȘI DEZVOLTĂRII RURALE
AGENȚIA NAȚIONALĂ PENTRU ZOOTEHNIE
„PROF. DR. G. K. CONSTANTINESCU”**

ATESTAT nr.1

Se acordă Uniunii Generale a Crescătorilor de Porumbei, Păsări și Animale Mici din România, denumită în continuare UGCPPAMR, cu sediul în localitatea Sănnicolau Mare, strada Oituz nr.36, județul Timiș, în conformitate cu Legea Zootehniei nr.72/2002-art.2 și cu H.G. nr.1188/2014-art.5, lit.o), cu modificările și completările ulterioare, pentru activitatea în domeniul creșterii și promovării rasei de iepuri “Iepurile de Cluj”.



DIRECTOR GENERAL

Dr. Ing. Iacob LELIOR

DATA: 17.03.2016

ROMANIA



**MINISTERUL AGRICULTURII ȘI DEZVOLTĂRII RURALE
AGENȚIA NAȚIONALĂ PENTRU ZOOTEHNIE
„PROF. DR. G. K. CONSTANTINESCU”**

ATESTAT nr.2

Se acordă Uniunii Generale a Crescătorilor de Porumbei, Păsări și Animale Mici din România, denumită în continuare UGCPPAMR, cu sediul în localitatea Sănnicolau Mare, strada Oituz nr.36, județul Timiș, în conformitate cu Legea Zootehniei nr.72/2002-art.2 și cu H.G. nr.1188/2014-art.5, lit.o), cu modificările și completările ulterioare, pentru activitatea în domeniul creșterii și promovării rasei de iepuri “Uriaș de Transilvania”.



DIRECTOR GENERAL,

Dr. Ing. Iacob LELIOR

DATA: 17.03.2016

ROMANIA



**MINISTERUL AGRICULTURII ȘI DEZVOLTĂRII RURALE
AGENȚIA NAȚIONALĂ PENTRU ZOOTEHNIE
„PROF. DR. G. K. CONSTANTINESCU”**

ATESTAT nr.3

Se acordă Uniunii Generale a Crescătorilor de Porumbei, Păsări și Animale Mici din România, denumită în continuare UGCCPPAMR, cu sediul în localitatea Sănnicolau Mare, strada Oituz nr.36, județul Timiș, în conformitate cu Legea Zootehniei nr.72/2002-art.2 și cu H.G. nr.1188/2014-art.5, lit.o), cu modificările și completările ulterioare, pentru activitatea în domeniul creșterii și promovării rasei de iepuri “Iepurele Secuiesc”.



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