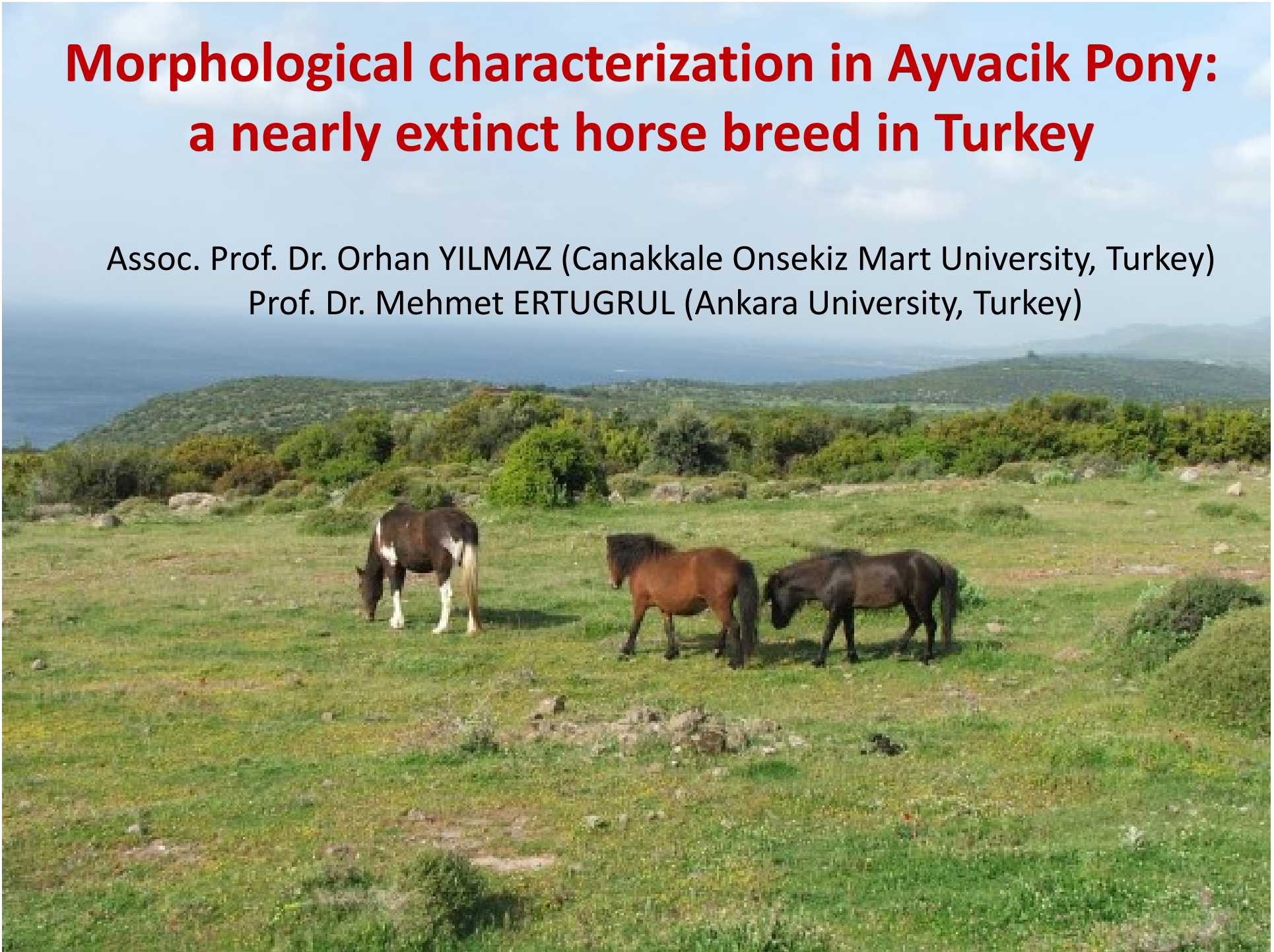


Morphological characterization in Ayvacik Pony: a nearly extinct horse breed in Turkey

Assoc. Prof. Dr. Orhan YILMAZ (Canakkale Onsekiz Mart University, Turkey)
Prof. Dr. Mehmet ERTUGRUL (Ankara University, Turkey)

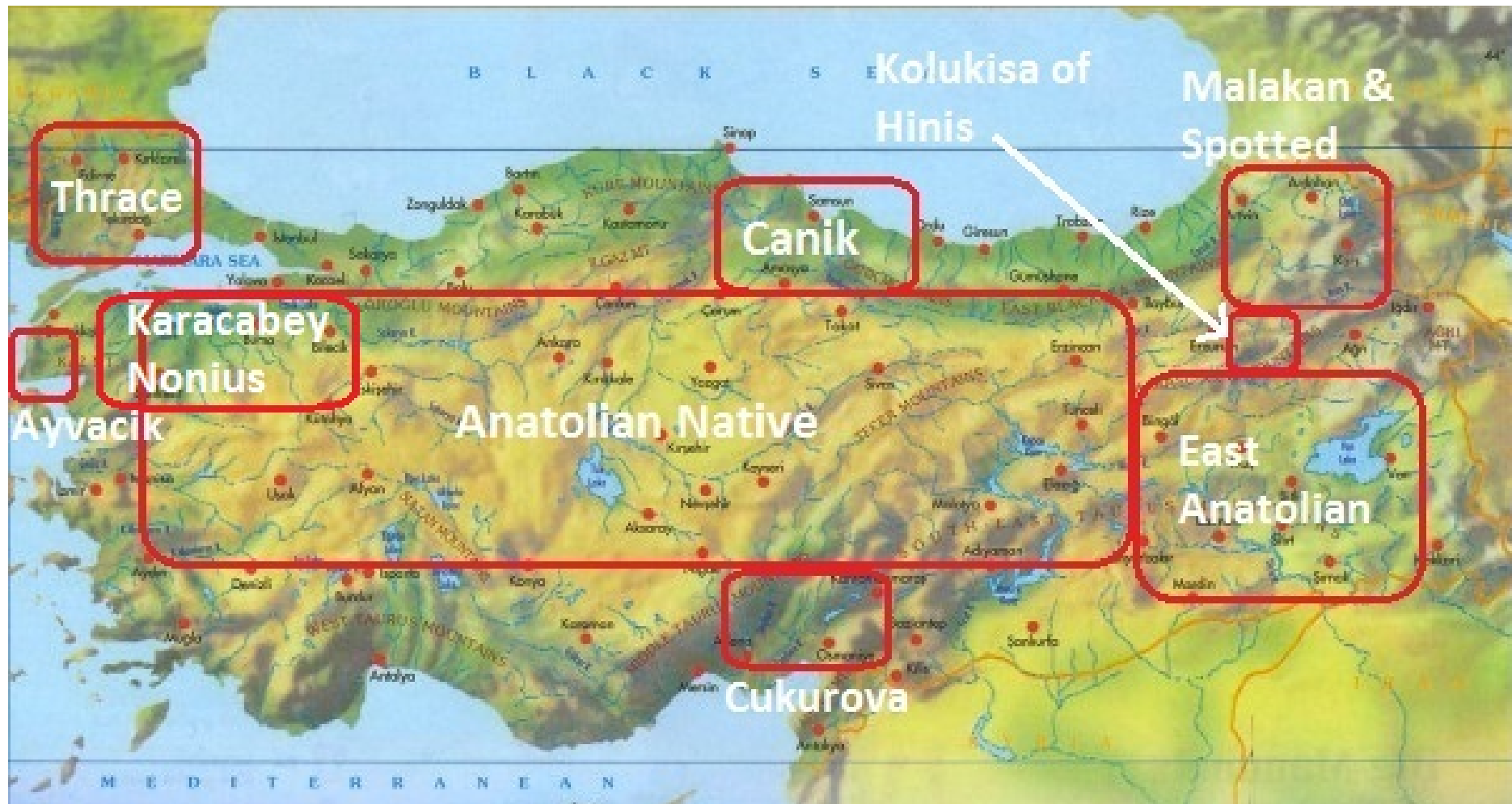


Extant horse breeds of Turkey

1. Anatolian Native
2. Ayvacik
3. Canik
4. Cukurova
5. East Anatolian
6. Karacabey Nonius
7. Kolukisa of Hinis
8. Malakan
9. Spotted
10. Thrace
11. Turkish Arabian
12. Turkish Thoroughbred



Distribution of extant horse breeds of Turkey



Some examples of Ayvacik Horses

Ayvacik Horse



Ayvacik Horse



Ayvacik foal and mare



Materials and Methods

- 198 Ayvacik horses (128 males and 70 females)
- April 2013, Ayvacik County of Canakkale Province



Results

Table 1. Distributions of coat color of Ayvacik Horses.

	Bay	Black	Gray	Chestnut	Roan	Buckskin
n	125	34	21	13	3	2
%	63.1	17.2	10.6	6.6	1.5	1.0

Results

Table 2. Some phenotypic traits in Ayvacik Horses.

Trait	Overall (n=198)
Height at Withers (HW)	126.4 ± 0.37
Height at Rump (HR)	125.4 ± 0.37
Body Length (BL)	133.4 ± 0.52
Heart Girth Circumference (HGC)	151.4 ± 0.57
Chest Depth (CD)	56.6 ± 0.21
Cannon Circumference (CC)	16.9 ± 0.07
Head Length (HL)	52.7 ± 0.19
Ear Length (EL)	13.3 ± 0.09

Results

Table 3. Phenotypical correlation coefficients among body measurements in Ayvacik Horse.

Traits	HW	HR	BL	HGC	CD	CC	HL
HR	0.92**						
BL	0.61**	0.58**					
HGC	0.51**	0.54**	0.60**				
CD	0.57**	0.57**	0.52**	0.46**			
CC	0.64**	0.61**	0.55**	0.49**	0.48**		
HL	0.58**	0.56**	0.56**	0.43**	0.53**	0.56**	
EL	0.33**	0.38**	0.29**	0.24**	0.29**	0.30**	0.37**

**P<0.01

Conclusions 1

- The smallest horse breed in Turkey

Table 4. Heights at withers in some Turkish horse breeds.

Breed (Source)	HW (cm)
Ayvacik (Yarkin 1962, Hendricks 1995, Gulec 2005, Yilmazer 2007)	105-126
Ayvacik (Yilmaz & Ertugrul 2014)	126.4
Canik (Yarkin 1962)	134.8
Cukurova (Said 1940, Gulec 2005)	136.8-140
Spotted (Yilmaz and Ertugrul 2011 ^{a,b})	137.9
Kolukisa of Hinis (Gulec 2002)	136.5
Malakan (Ariturk 1956, Emiroglu ve Yuksel 2009, Yilmaz et al. 2012 ^a)	130-145
Anatolian Native (Said 1940, Sigindere 1977, Kirmizibayrak et al. 2004)	130-140
East Anatolian (Gulec 2005)	Max 148
Turkish Arabian (Duzgunes 1953, Kaygisiz et al. 2011, Yilmaz et al. 2012 ^d)	151,7-158,5
Turkish Thoroughbred (Gulec 2005, Yilmaz and Ertugrul 2012 ^a)	160-165
Karacabey Nonius (Aral 1974)	168.5

Conclusions 2

- Crossbreeding

Table 5. Heights at withers in various sources in Ayvacik Horses

Source	HW (cm)
Yarkin (1962)	118
Hendricks (1995)	110
Yilmazer (2007)	118
Yilmaz & Ertugrul (2014)	126.4

Conclusions 3

- Project of TURKHAYGEN-I
- Conservation should be go on

Thank you so much for listening.

For the full paper

Contact: zileliorhan@gmail.com