

Country	Place	No. of specimens		Subspecies	Diploid number	
		♂	♀			
Italy	Toscana	Giglio	5	9	<i>frugivorus</i> Raf.	2n = 38
		Giannutri	11	9	<i>alexandrinus</i> Geoff.	2n = 38
		Maremma	9	7	<i>frugivorus</i> Raf.	2n = 38
	Lazio	Roma	1	3	<i>frugivorus</i> Raf.	2n = 38
		S. Severa	1	—	<i>frugivorus</i> Raf.	2n = 38
		Fiumicino	—	1	<i>alexandrinus</i> Geoff.	2n = 38
		Nemi	—	1	<i>alexandrinus</i> Geoff.	2n = 38
	Sardegna	Caprera	3	1	<i>alexandrinus</i> Geoff.	2n = 38
Switzerland	Genève	Air-le-Ville	2	1	<i>rattus</i> L.	2n = 38
	Valais	Sion	—	1	<i>rattus</i> L.	2n = 38
France	Provence		3	3	<i>frugivorus</i> Raf.	2n = 38
England	Surrey		2	4	<i>frugivorus</i> Raf.	2n = 38

the karyotype in the population of Tuscany, are found in any other population studied (Figure).

The fact that populations of *Rattus rattus* with a 38 chromosomes karyotype is not an isolated phenomenon of a restricted Italian area but apparently extended at least to all Western Europe induces us to interpret the Australian and South-American populations with a 38 chromosomes genome as a repopulating or invasion of black rats originating on the European continent via the intense sea traffic that exists between Western Europe and the areas mentioned.

At this point it is necessary to recall that YOSIDA et al.^{2,4} ascribed the Australian population with a 38 chromosomes complement to the subspecies *rattus* L. which is lacking in South-East-Asia, whereas it is common in

central Europe where our observations have characterized it with the same diploid number^{11,12}.

Riassunto. Nell'ambito del problema del polimorfismo cromosomico di *Rattus rattus* è stato studiato il cariotipo di varie popolazioni europee (Italia, Svizzera, Francia ed Inghilterra) riferibili alle sottospecie *frugivorus*, *rattus* ed *alexandrinus*. Il numero diploide osservato è sempre stato $2n = 38$ e non è emersa nessuna differenza morfologica tra i cariogrammi delle varie popolazioni.

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Karyotype of the 'Carpincho' *Hydrochaeris hydrochaeris uruguayensis* (Rodentia Hydrochaeridae)

The rodent commonly called 'Carpincho' in Uruguay and Argentina is the largest which exists throughout the world at present. It usually lives at the riversides and also has aquatic habits. The adult animals may reach a weight of about 70 kg. Distribution: South America east of the Andes and south to Uruguay, west in Panama to the Canal^{1,2}.

Peripheral blood was drawn from the ears of 4 young animals caught in different places of the Uruguayan territory. Slightly modified EDWARDS³ method for blood cultures was followed. A diploid chromosome number of 66 was observed ($2n = 64A + XY$) in cells harvested at 92 h of incubation at 37°C.

According to the length and the centromere position, the autosomes were classified in 6 main groups. Group A

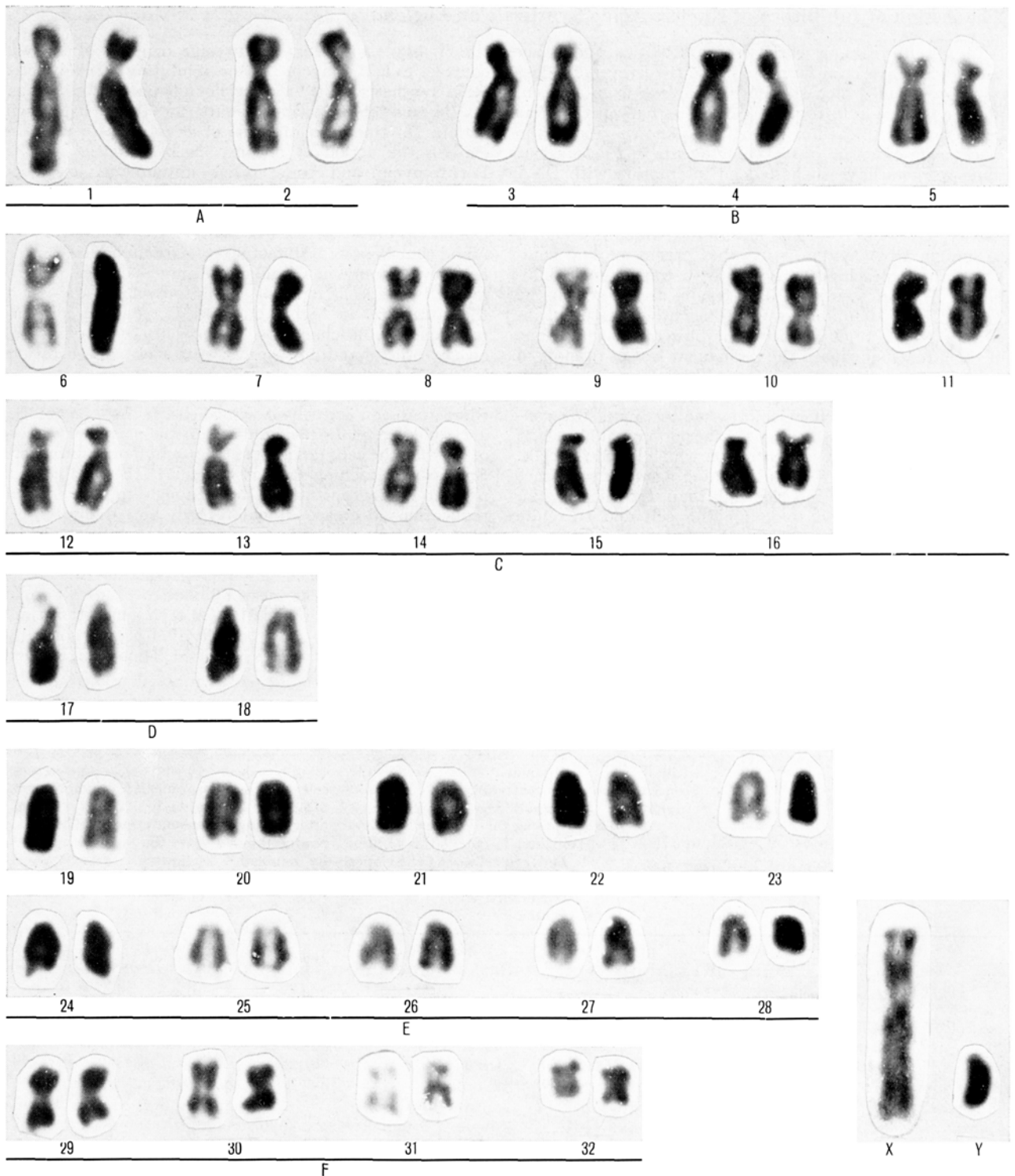
contains 2 pairs of large submetacentrics; group B, 3 pairs of medium size submetacentrics; group C, 6 pairs of metacentrics and 5 pairs of submetacentrics; group D, 2 pairs of acrocentrics out of them (pair numbered 17) has small satellites; group E, 10 pairs of telocentrics; and group F, 4 pairs of small metacentrics.

The sex chromosomes constitute a well differentiated heteromorphic pair. The X chromosome is submeta-

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Karyotype of the male *Hydrochaeris hydrochaeris uruguayensis*.

centric and the largest of the chromosome complement, while the Y chromosome is telocentric and one of the smallest (Figure). The complete study of the somatic and meiotic chromosomes of this interesting animal, unknown up to the present, will be published elsewhere⁴.

Resumen. Se describe por primera vez el cariotipo del roedor mas grande existente, el que posee $2n = 66$ cromosomas.

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