

Gekkota is species-rich and diverse group of squamate reptiles (Reptilia: Squamata) with almost global distribution. There were many hypothesis defined about the phylogeny of this group, traditionally based on morphological data. The essential reversal in phylogenetic relationships occurred with the entry of molecular analysis, whose differ in their conclusions from traditional approach fundamentally, even in positions of mayor lineages. This fact has an essential importance for the karyotype evolution study of this group. The ancestral state is considered as $2n=38$ karyotype with all chromosomes acrocentric. In some species is this karyotype kept, in another there is apparent an influence of chromosome changes, mostly Robertsonian fusions and pericentric inversions. Diploid chromosome number is from 16 to 46, but the most common is $2n=38$ karyotype of mostly acrocentric chromosomes, gradually decreasing in size. The interesting character of this group is extraordinary variability in sex determining mechanisms. We can find there species with temperature sex determination and also species with genotypic sex determination (both types XX/XY and ZZ/ZW). Sex chromosomes data are documented in only 17 species. Sex chromosomes differ rapidly in their morphology and their homology between sister taxa was not proved recently. All suggests that sex chromosomes in this group have evolved many times independently.