**CHARACTERIZATION CYTOGENETICS OF *Stylosanthes* SPP. (*FABACEAE PAPILIONOIDEAE*) GERMPLASM ACCESSIONS COLLECTED IN NORTHEAST REGION OF BRAZIL**

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One of the factors that limit the performance of goat and sheep production in the Brazilian semiarid region is the shortage of food for feeding livestock. This situation is due to many factors, one of them is related to lack of research for evaluating and selecting forage plants, including the species of Stylosanthes. These ones are characterized by presenting great variability, both intra- and interspecific, and studies on cytogenetics of the genus Stylosanthes report the existence of diploid, tetraploid and hexaploid in several species. This study aimed to characterize 17 Stylosanthes accessions, initially identified as S. scabra, identifying number, chromosome morphology and the distribution pattern of heterochromatin. In this case, root apexes were pretreated and fixed in Carnoy. The roots were digested in enzyme solution (cellulase/pectinase), and the material was prepared by crushing technique, followed by the staining with fluorochromes CMA3 and DAPI. Among germplasm accessions were observed species with 2n = 40 (S. scabra) and 2n = 20 (S. seabrana) chromosomes, interphase nucleus of semi-reticulate type, and karyotype with chromosome morphology ranging from the submetacentric to metacentric with length around 2.5 µm. The analysis with double staining CMA3 / DAPI enabled visualization of four CMA+ blocks in S. scabra accessios, two of them observed in a subterminal region of the short arm of a submetacentric chromosome pair and the other two blocks located in the proximal region of another metacentric pair. For the accessions of S. seabrana was observed two CMA+ blocks in the subterminal region of a metacentric pair. DAPI+/CMA- bands were observed in CPAC 1261 and CPAC 5205 accessions. The CMA + blocks may to be related to loci of the nucleolus organizer regions (NOR). In some cells has not been possible visualize the band in one of the chromosome pairs due to their small size and the tendency of distension of the region in the analyzed metaphases. The differential staining of chromosomes, associated with other cytogenetic markers may assist the characterization of access germplasm collections, to support the breeding of this species.

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