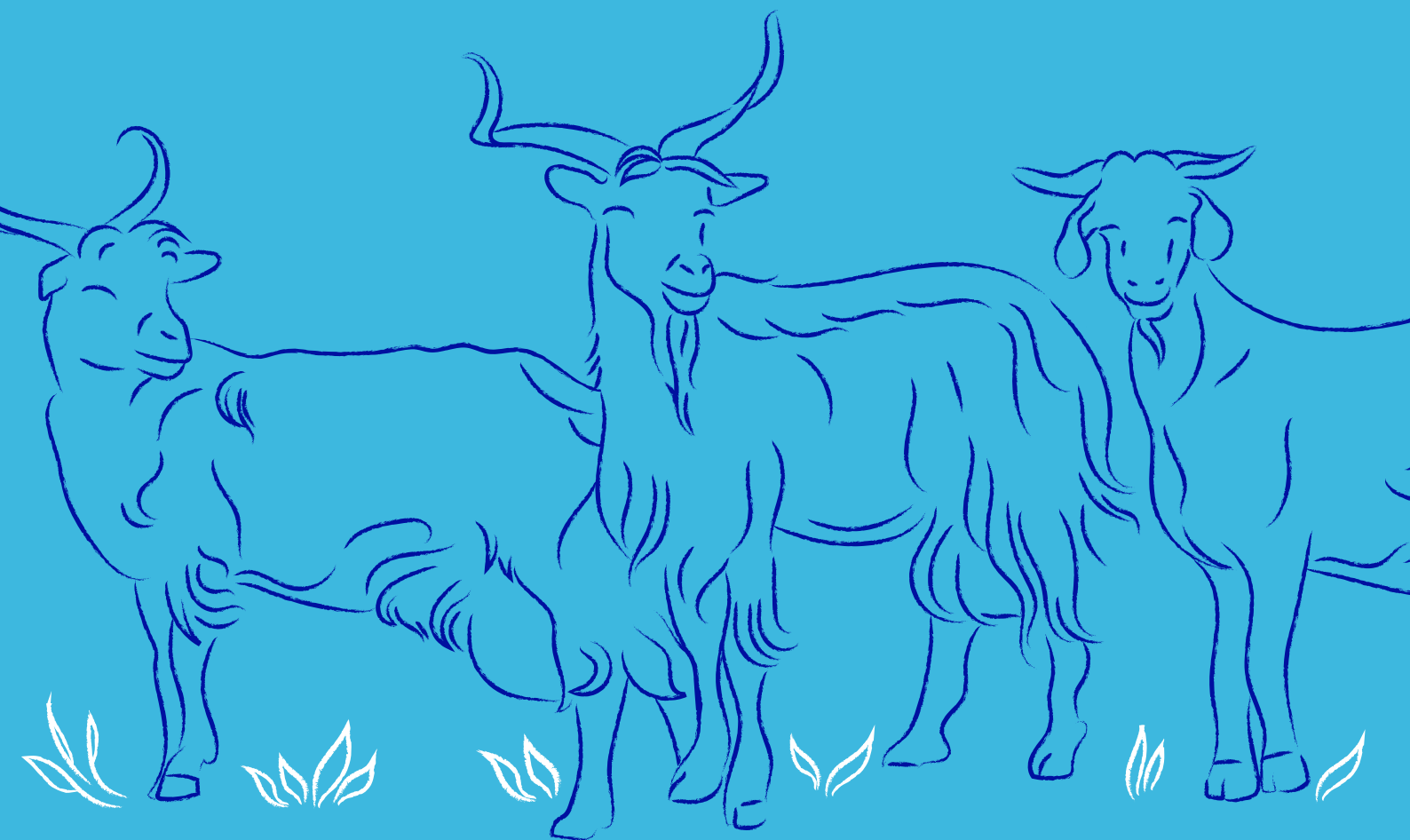


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Colour and Shape Preferences in Goat Kids: Implications for Environmental Enrichment, preliminary results

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Environmental enrichment plays a crucial role in promoting natural behaviors and improving welfare in farm animals. This study investigates the colour and shape preferences of Majorera goat kids (*Capra aegagrus hircus*) to enhance enrichment strategies. Six goat kids (five females, one male) underwent a novel object test using six 3D-printed objects combining two colours (green, purple) and three shapes (sphere, cube, cylinder). Behavioral responses were recorded in an 8×2 m pen, measuring time spent in the No Interest and Interest Zones, contact duration, and frequency of interactions. Statistical analyses, including the Kruskal-Wallis test and Mann-Whitney U test, identified significant preferences for purple objects ($p=0.027$) and spherical shapes ($p=0.001$). Goat kids spent more time in the Interest Zone with spheres than with cubes or cylinders ($p<0.05$). However, neither colour nor shape significantly affected contact duration or interaction frequency ($p>0.05$). These findings highlight the potential of incorporating spherical, purple objects in goat enrichment programs. Future research should explore the impact of these preferences on cognitive stimulation and welfare outcomes in larger populations.