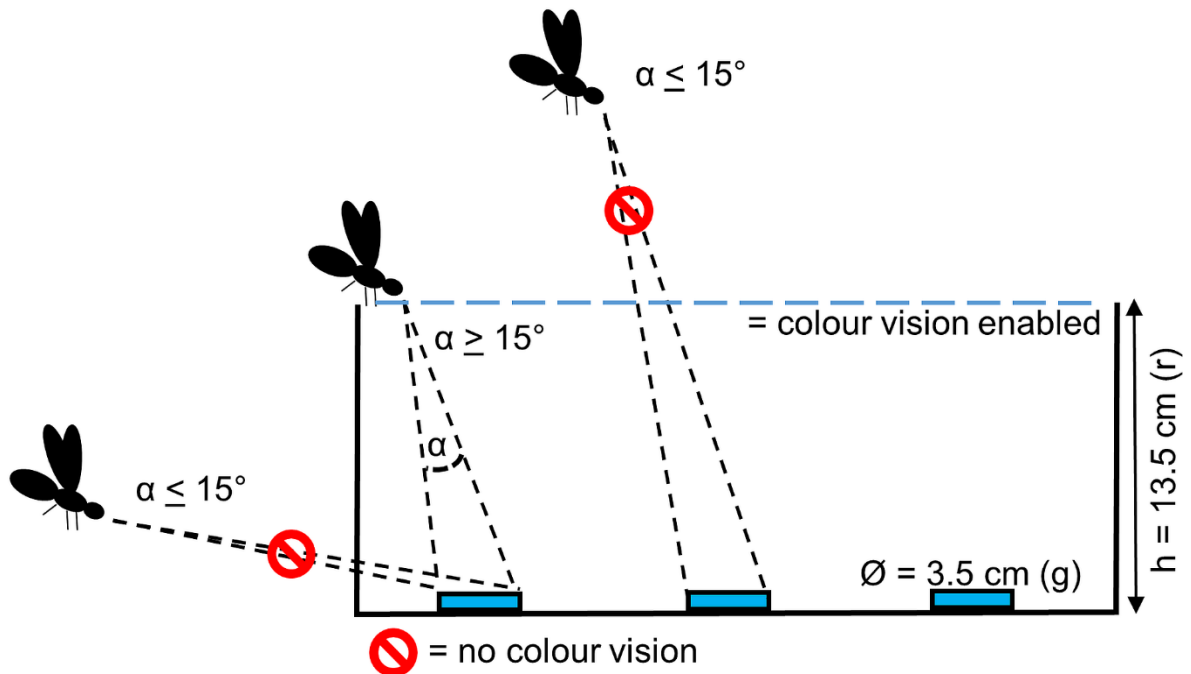


Online Resource 2 Calculation of arena wall height

In order to calculate the height of the arena's wall necessary to enable colour vision and disable sole perception via green contrast the following equation was applied:

$h = g / (2 * \tan(\alpha/2))$. (h = height of the arena; g = diameter of stimulus; α = visual angle)(Giurfa et al. 1996).



Giurfa M, Vorobyev M, Kevan P, Menzel R (1996) Detection of coloured stimuli by honeybees: minimum visual angles and receptor specific contrasts. *J Comp Physiol A* 178: 699–709.