



Appendix D Sequential FISH of *A. hoehnei* (a-f) and cultivated peanut Z5297 (g-m). **a and g,**

gray white, DAPI staining; **b and h**, blue, DAPI staining; **c and I**, green, 5S rDNA labeled with biotin-16-dUTP and detected with fluorescein anti-biotin; **d and j**, red, 45S rDNA labeled with digoxigenin-11-dUTP and detected with anti-digoxigenin-rhodamine; **e and k**, green, (TTTAGGG)_n labeled with biotin-16-dUTP and detected with fluorescein anti-biotin; **l**, red, total genomic DNA probe of *A. ipaënsis* labeled with digoxigenin-11-dUTP and detected with anti-digoxigenin-rhodamine; **f and m**, merged of b to e and g to k, white (the original green signals of 5S rDNA were converted to pseudo color white), 5S rDNA; red, 45S rDNA; green, telomeric repeats (TTTAGGG)_n; fuchsia, GISH with total genomic DNA of *A. ipaënsis* (the original red signals of total genomic DNA converted to fuchsia pseudo color).