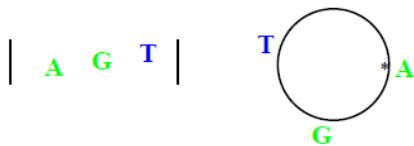
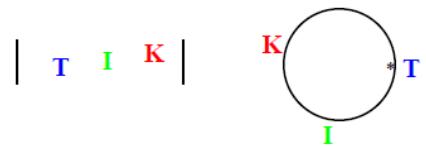


Fig. S6: Structural view of helix, beta turn, gamma turn and distorted geometry in two pigeon pea genotypes ICP 7035 and ICPL 84023

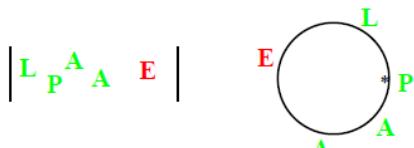
A): Structural view of 14 helix in ICP 7035



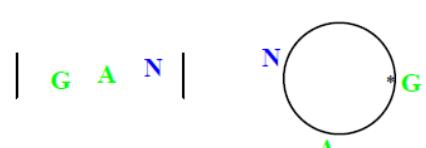
Helix 1. Ala2-Thr4
Sequence: AGT
Length: 3 residues



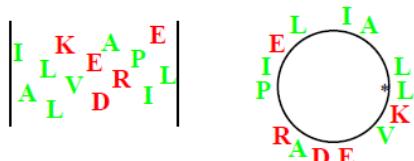
Helix 2. Thr17-Lys19
Sequence: TIK
Length: 3 residues



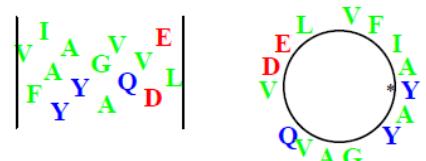
Helix 3. Pro21-Ala25
Sequence: PAELA
Length: 5 residues



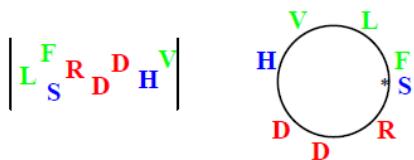
Helix 4. Gly27-Asn29
Sequence: GAN
Length: 3 residues



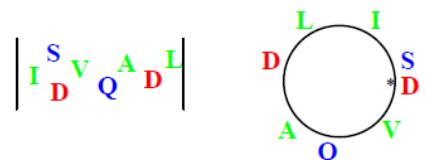
Helix 5. Leu32-Glu45
Sequence: LDIAVRLLEPIKAE
Length: 14 residues



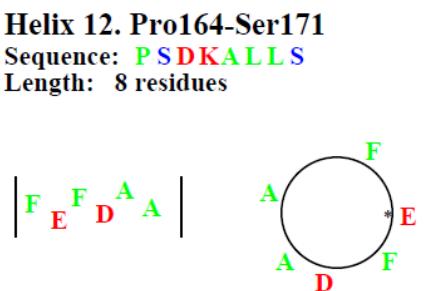
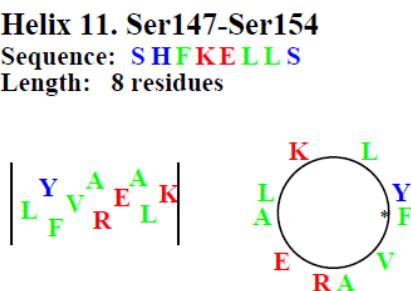
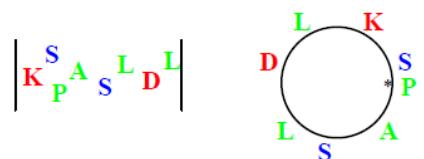
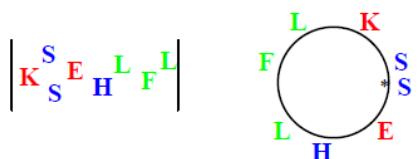
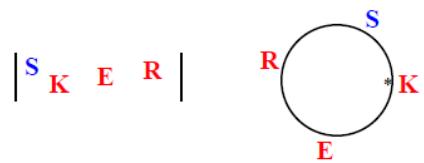
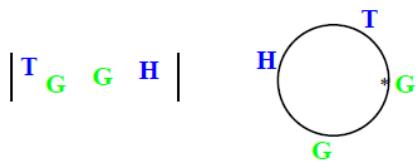
Helix 6. Tyr51-Ile65
Sequence: YADFYQLAGVVVAVEI
Length: 15 residues



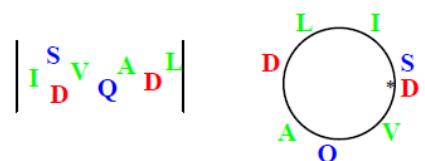
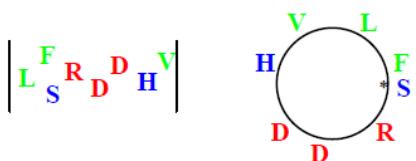
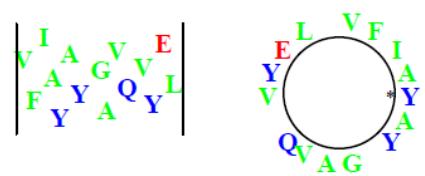
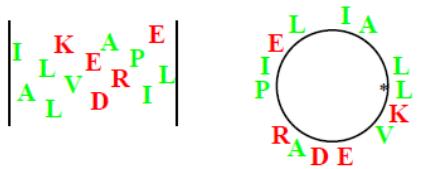
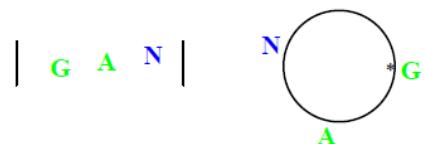
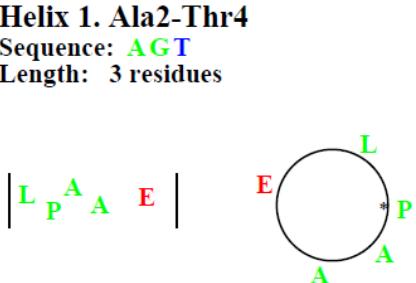
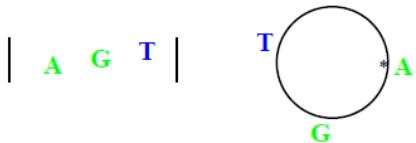
Helix 7. Ser96-Phe103
Sequence: SDHLRDVF
Length: 8 residues

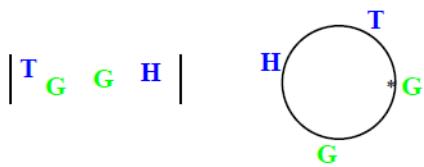


Helix 8. Asp111-Ser118
Sequence: DQDIVALS
Length: 8 residues

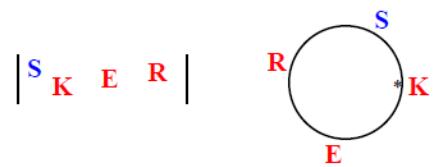


B): Structural view of 14 helix in ICPL 84023

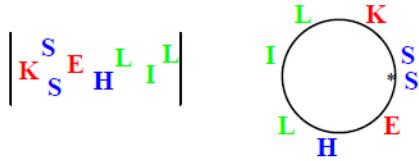




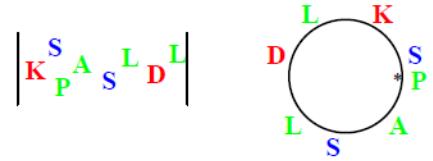
Helix 9. Gly119-Thr122
Sequence: **GGHT**
Length: 4 residues



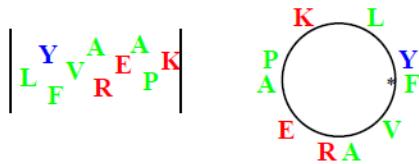
Helix 10. Lys128-Ser131
Sequence: **KERS**
Length: 4 residues



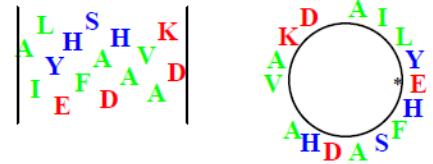
Helix 11. Ser147-Ser154
Sequence: **SHIKELLS**
Length: 8 residues



Helix 12. Pro164-Ser171
Sequence: **PSDKALLS**
Length: 8 residues

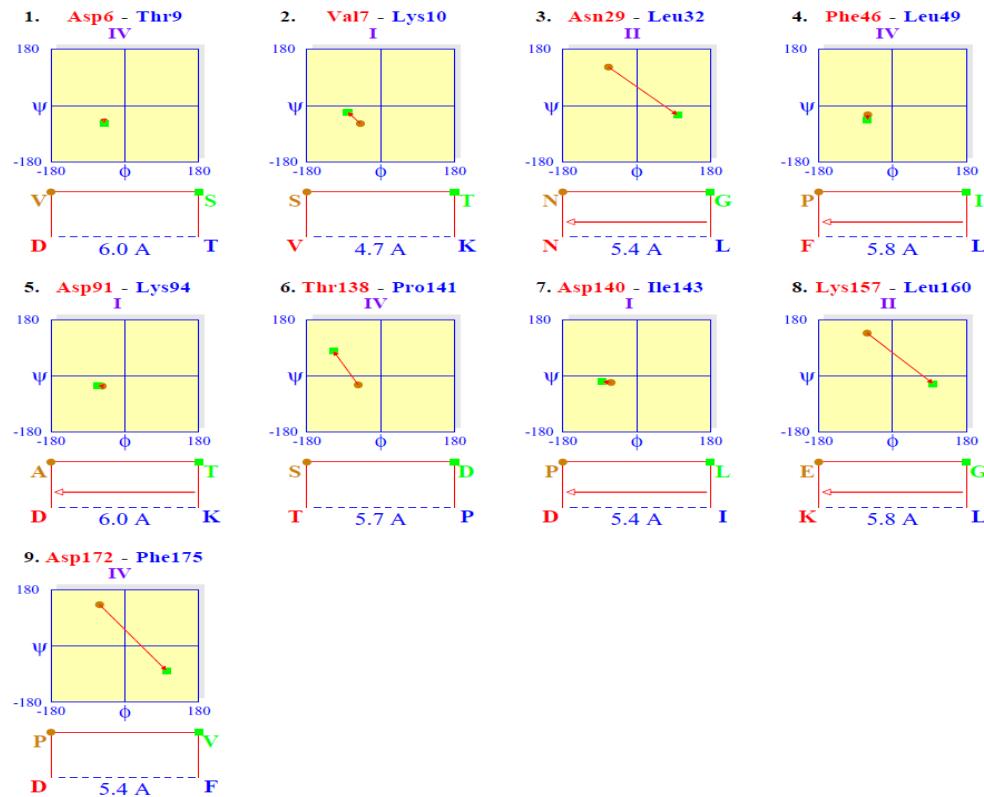


Helix 13. Phe175-Ala184
Sequence: **FRPLVEKYAA**
Length: 10 residues

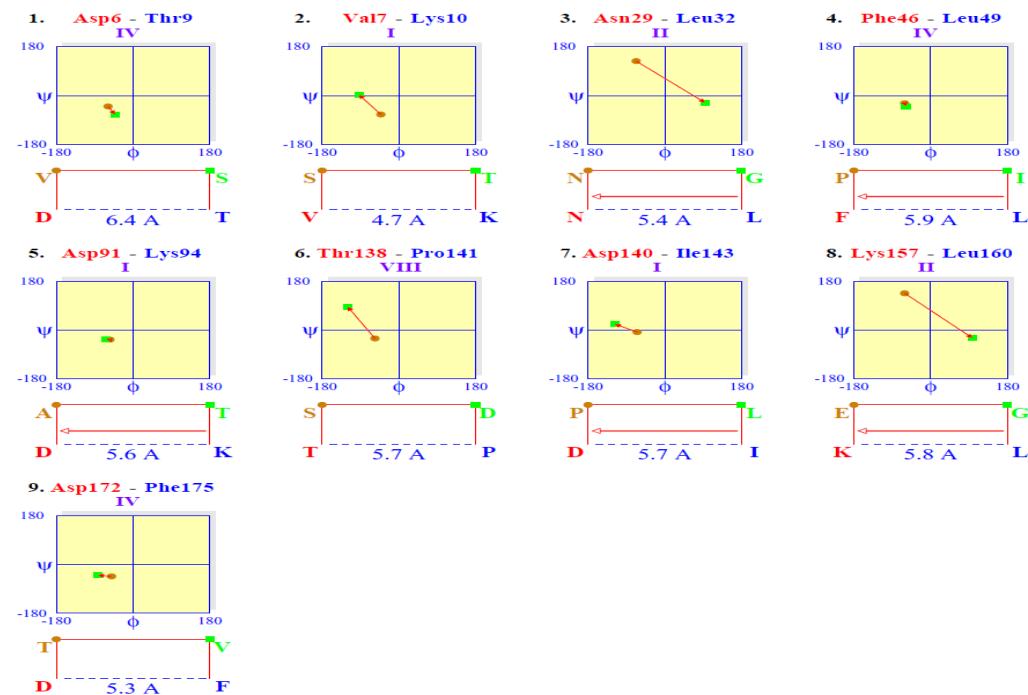


Helix 14. Glu186-Ser201
Sequence: **EDAIFADYAVAHHKLS**
Length: 16 residues

C) beta turn in ICP 7035

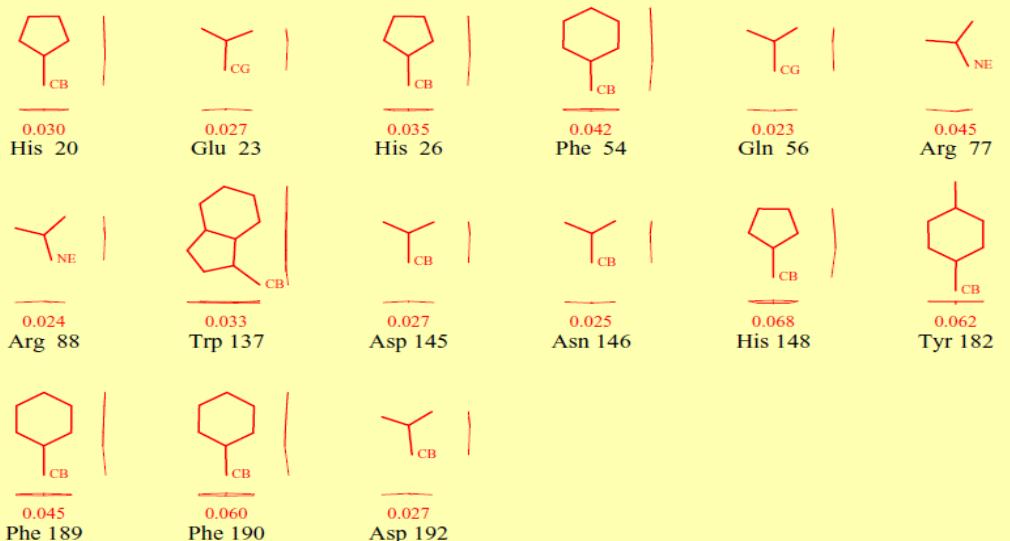


beta turn in ICPL 84023



D) Distorted geometry of ICP 7035

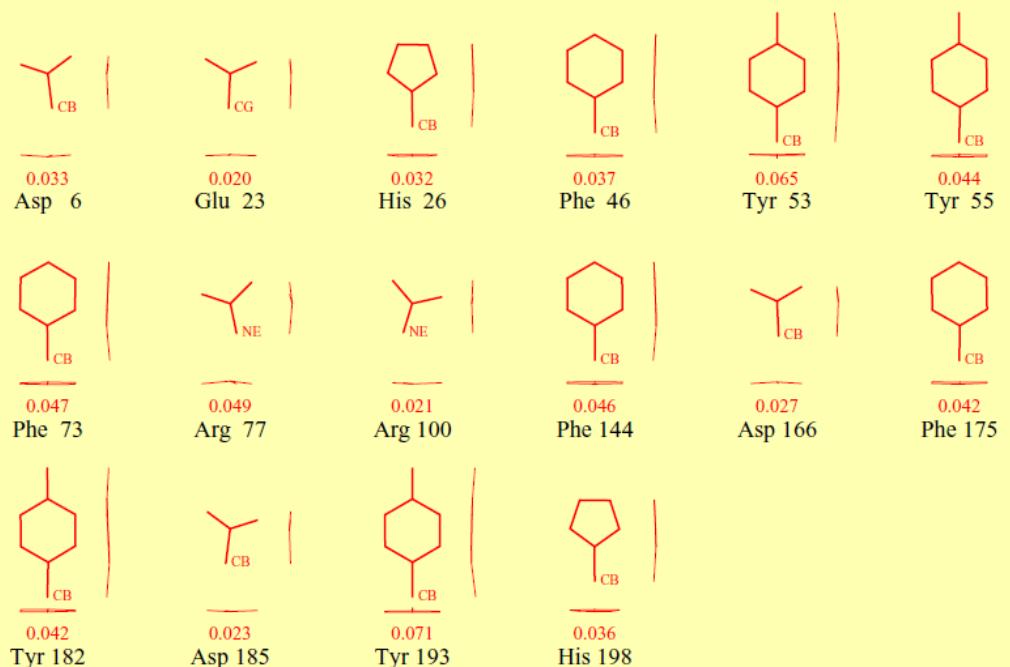
Planar groups



Sidechains with RMS dist. from planarity > 0.03Å for rings, or > 0.02Å otherwise. Value shown is RMS dist.

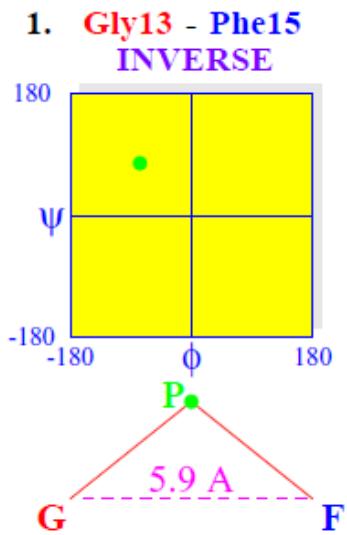
Distorted geometry of ICPL 84023

Planar groups

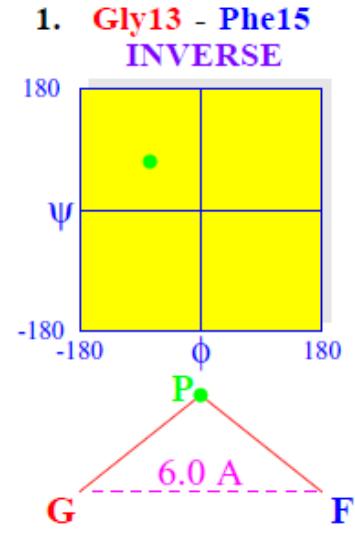


Sidechains with RMS dist. from planarity > 0.03Å for rings, or > 0.02Å otherwise. Value shown is RMS dist.

E) Gamma turn of ICP 7035 and ICPL 84023



ICP 7035



ICPL 84023