

Figure S4. Three-dimensional structures in ribbon representation of *RferOBP23* prepared based on the highly ranked structural homologue, insect pheromone/odorant binding proteins OBP1 (PDB: 3BJH) using PHYRE tool. Structures have been visualized using PYMOL v2.0.4. Structures have been visualized using PYMOL v2.0.4. The rainbow colouring mode is applied to the C α ribbons: the N-terminus (Nt) is blue, and the C-terminus (Ct) is red. The six helices (α 1- α 6) are indicated. The ligand (Phe1: 4RS,5RS)-4-methylnonan-5-ol) is represented as spheres. The predicted binding site for *RferOBP23* corresponded to Ile79 and Asp80, which are likely involved in pheromone binding.

