

# Evaluation of possible antioxidant, anti-hyperglycaemic, anti-Alzheimer and anti-inflammatory effects of *Teucrium polium* aerial parts (Lamiaceae)

## Supplementary data

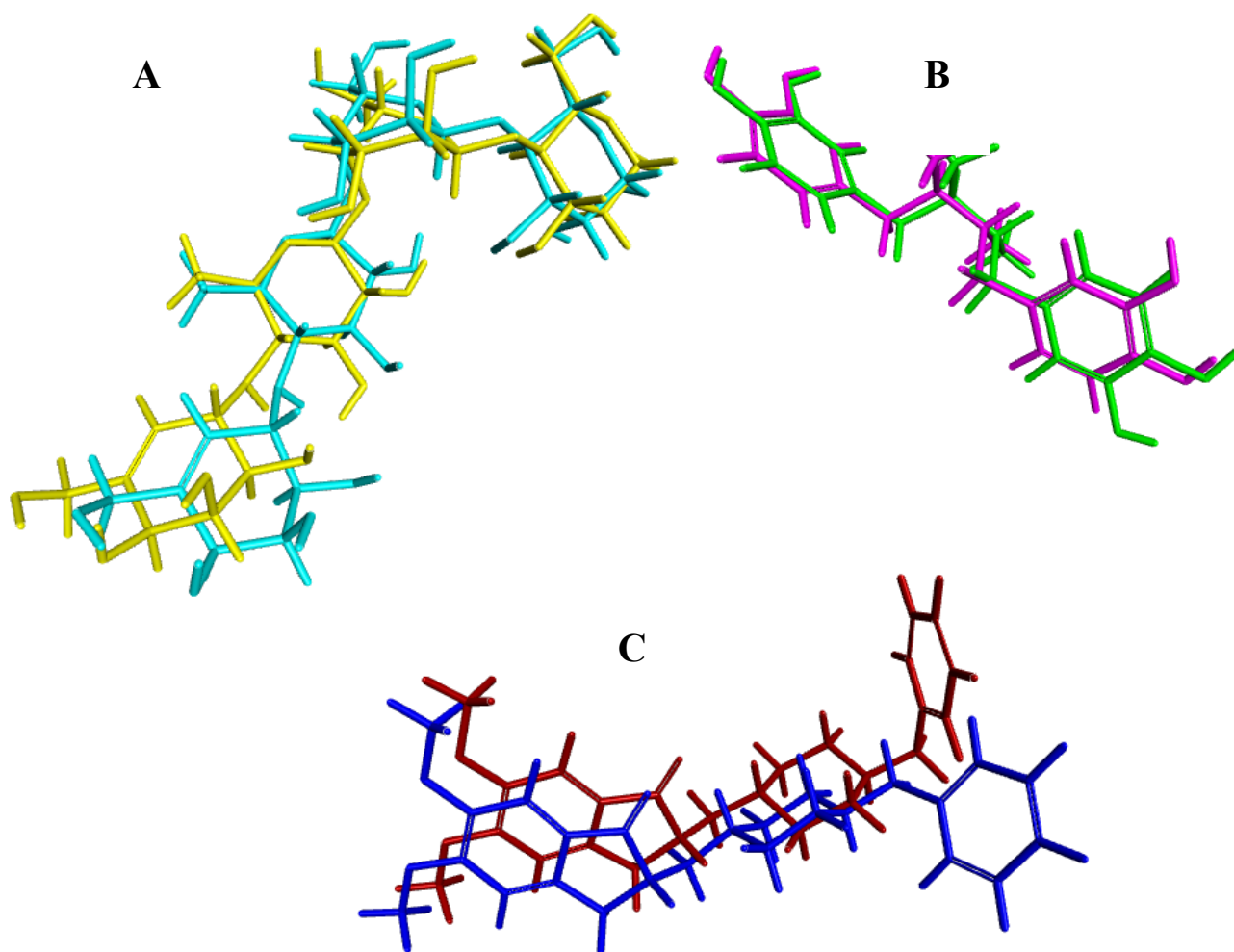
**Figure S1:** Validation of the docking experiments for human  $\alpha$ -amylase, (A), 5-lipoxygenase (B) and acetylcholine esterase, (C).

**Figure S2:** 2D binding mode of compounds identified from Algerian *Teucrium polium* aerial parts inside the active site of human  $\alpha$ -amylase

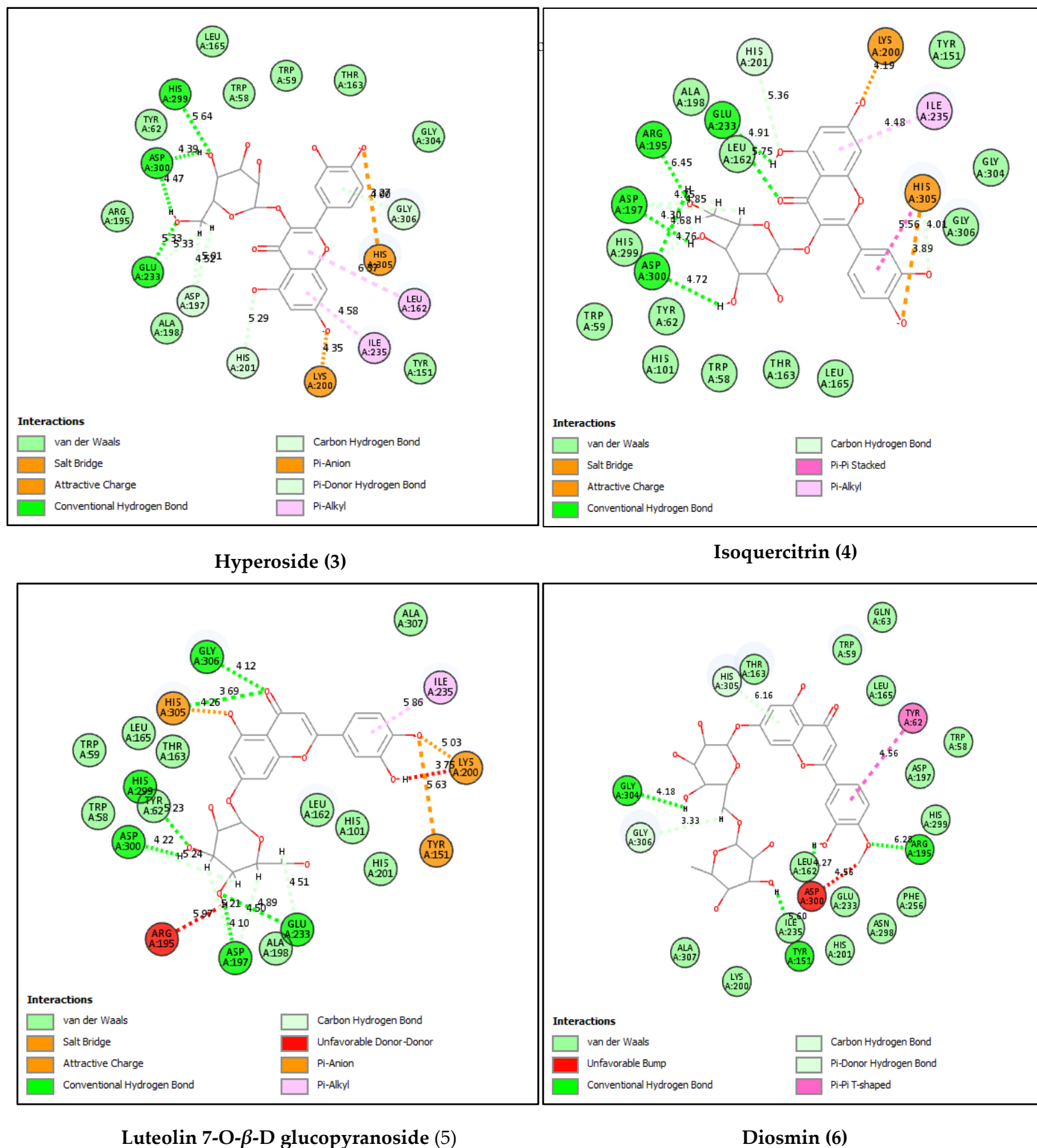
**Figure S3:** 2D binding mode of compounds identified from Algerian *Teucrium polium* aerial parts inside the active site of 5-lipoxygenase

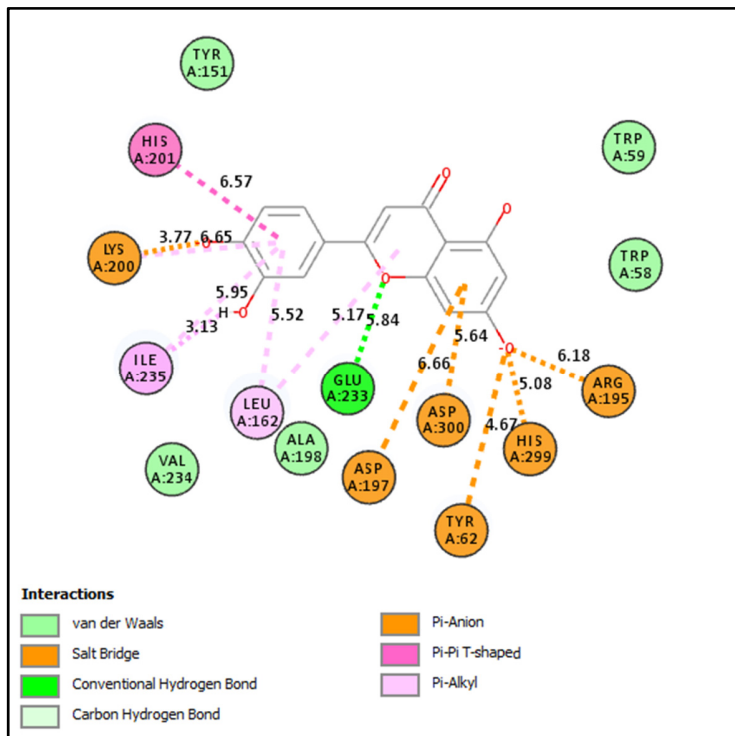
**Figure S4:** 2D binding mode of compounds identified from Algerian *Teucrium polium* aerial parts inside the active site of acetylcholine esterase

**Figure S1:** Validation of the docking experiments for human  $\alpha$ -amylase, (A), 5-lipoxygenase (B) and acetylcholine esterase, (C).

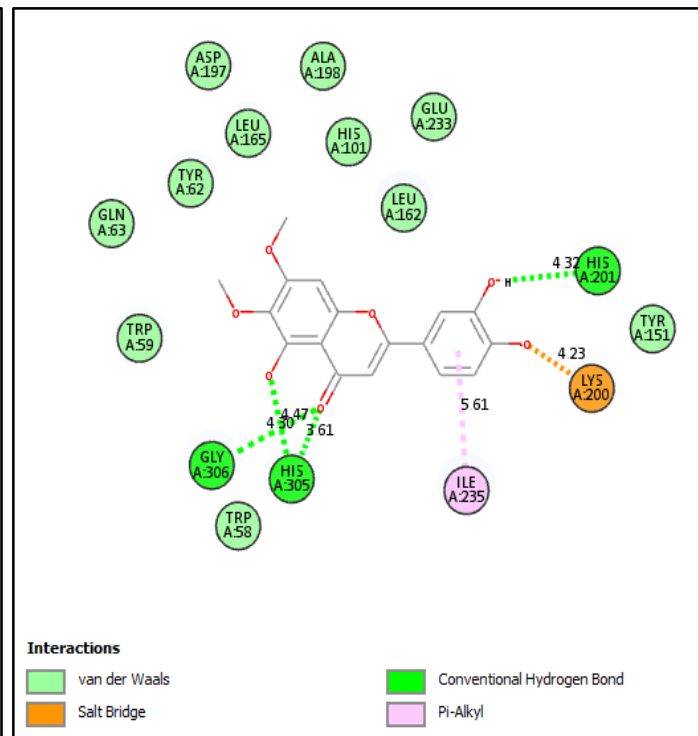


**Figure S2:** 2D binding mode of compounds identified from Algerian *Teucrium polium* aerial parts inside the active site of human  $\alpha$ -amylase

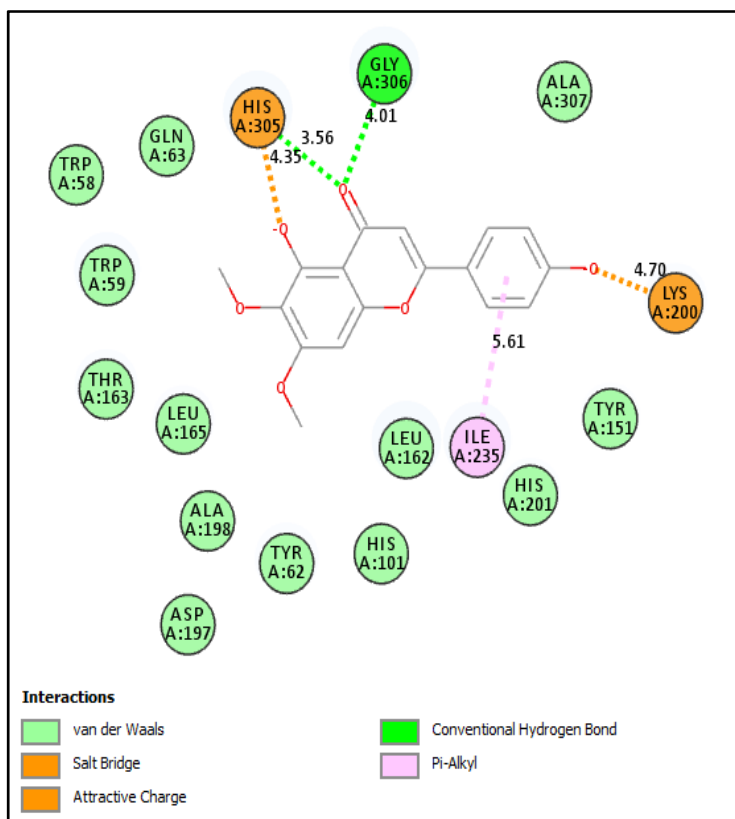




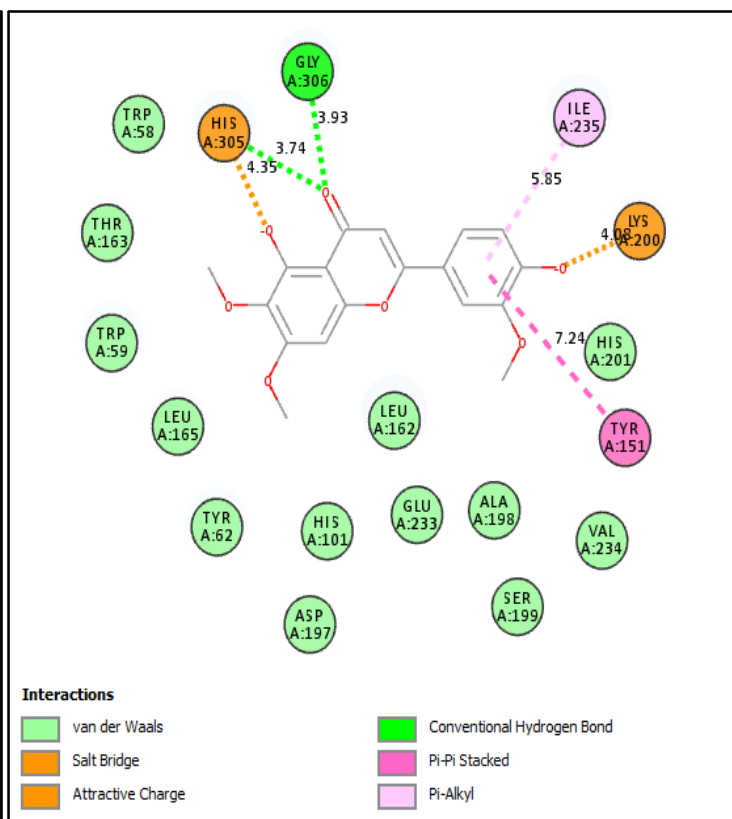
Luteolin (7)



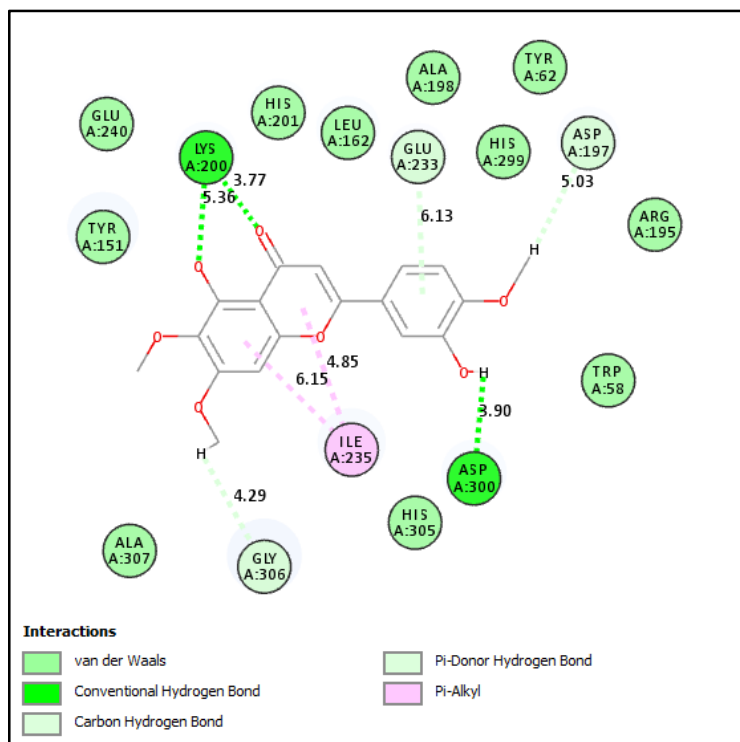
Cirsiliol (8)



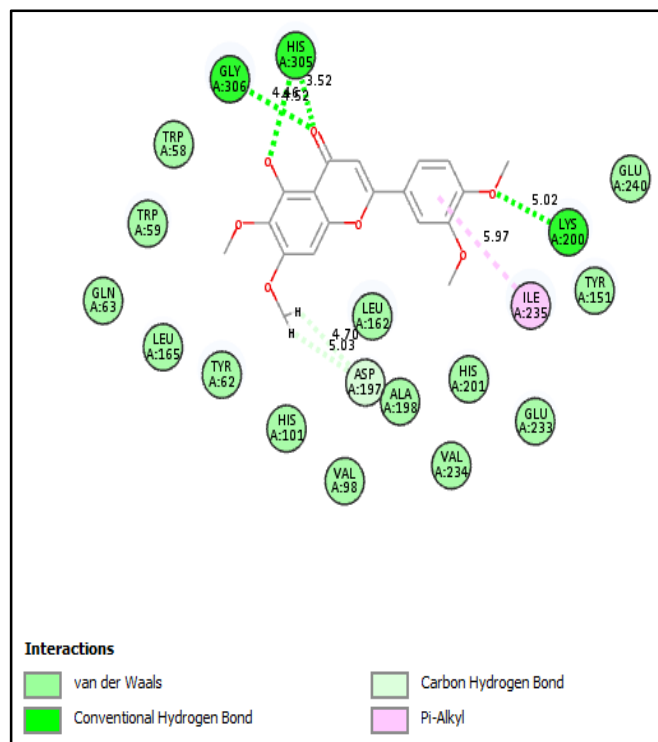
Cirsimaritin (9)



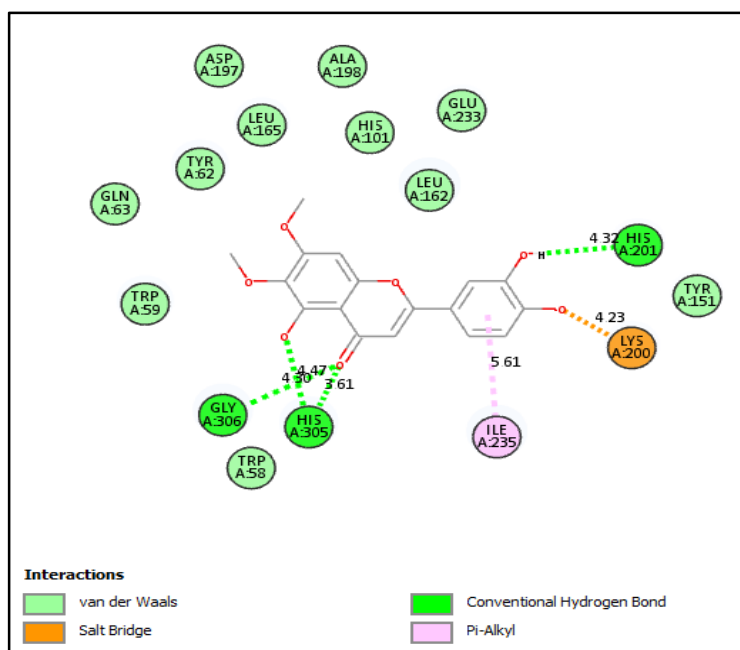
Cirsilineol (10)



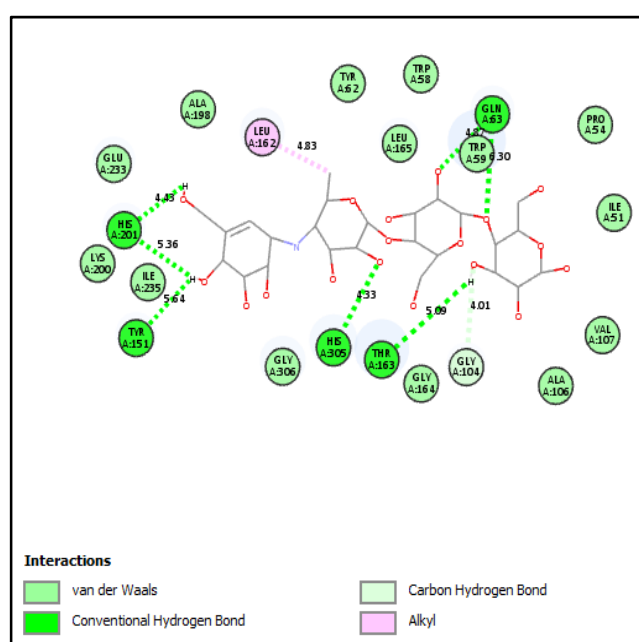
Eupatorin (11)



5-Desmethylinensetin (12)

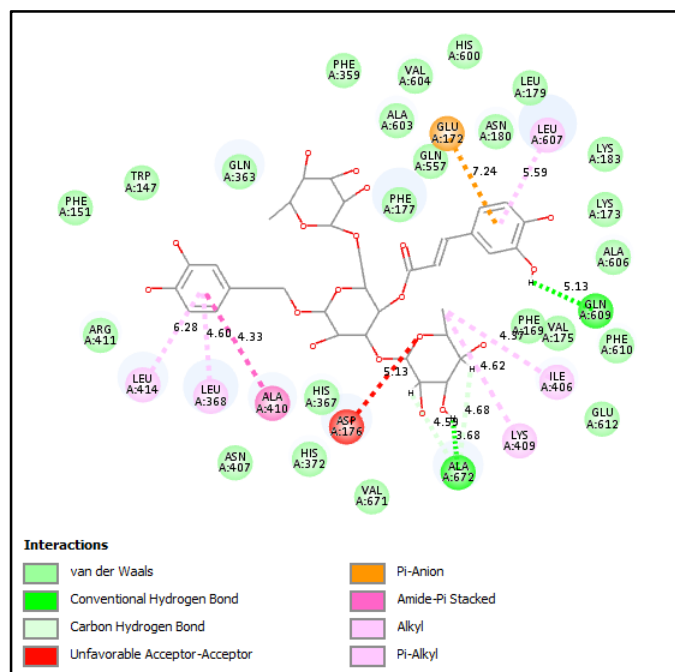


Salvigenin (13)

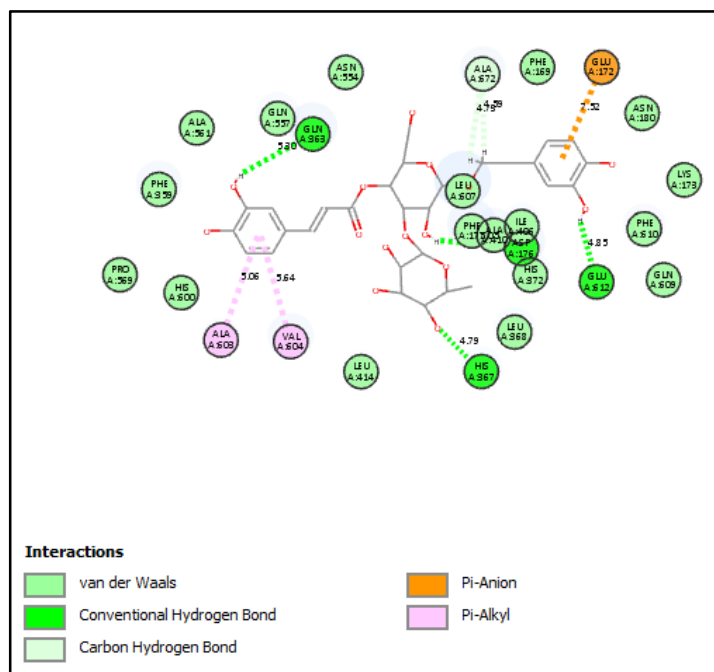


Acarbose

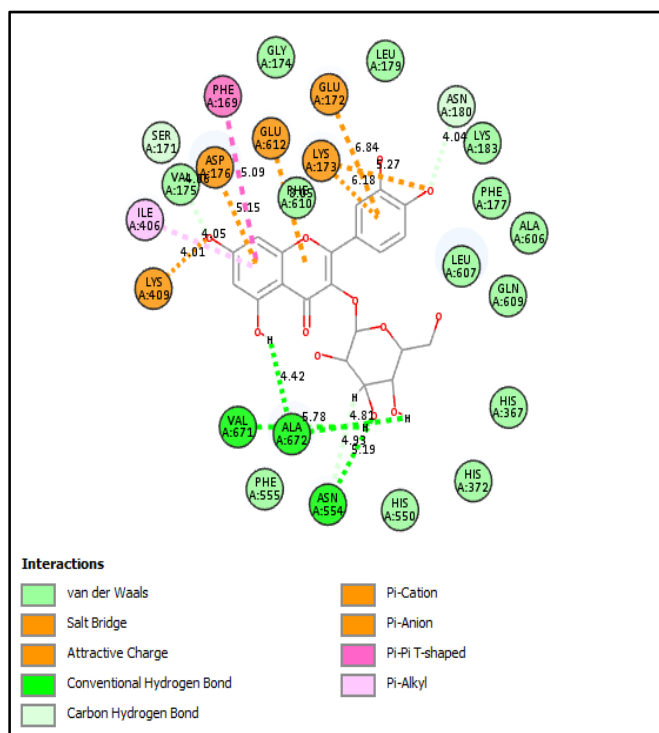
**Figure S3:** 2D binding mode of compounds identified from Algerian *Teucrium polium* aerial parts inside the active site of 5-lipoxygenase



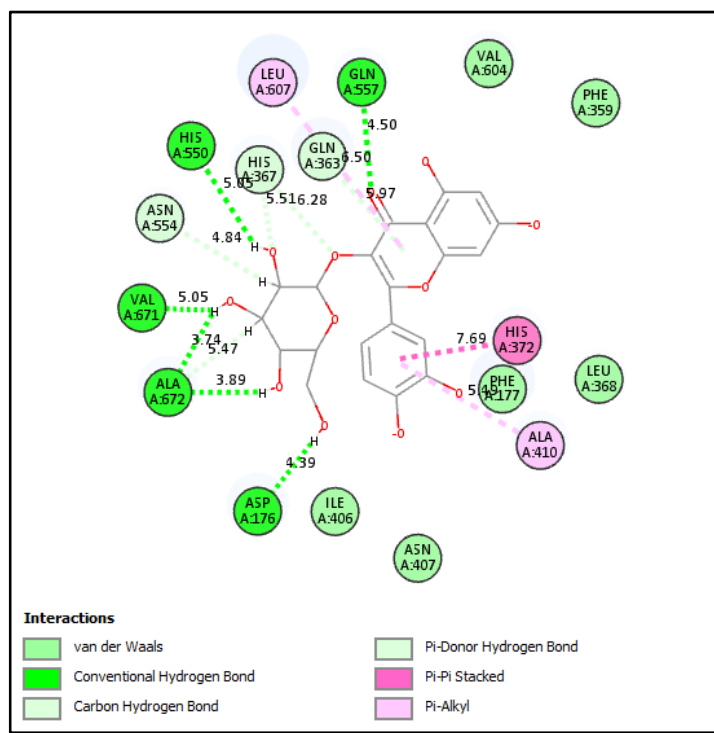
**Poliumoside (1)**



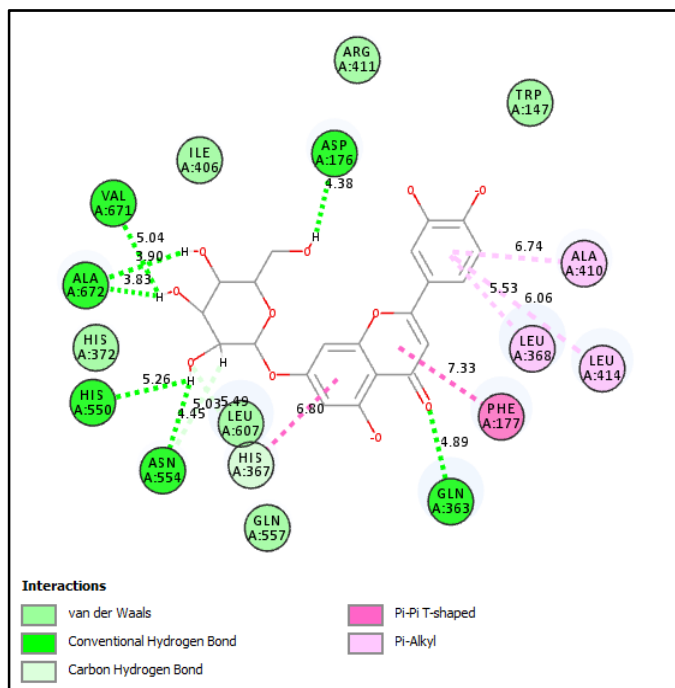
**Acteoside (2)**



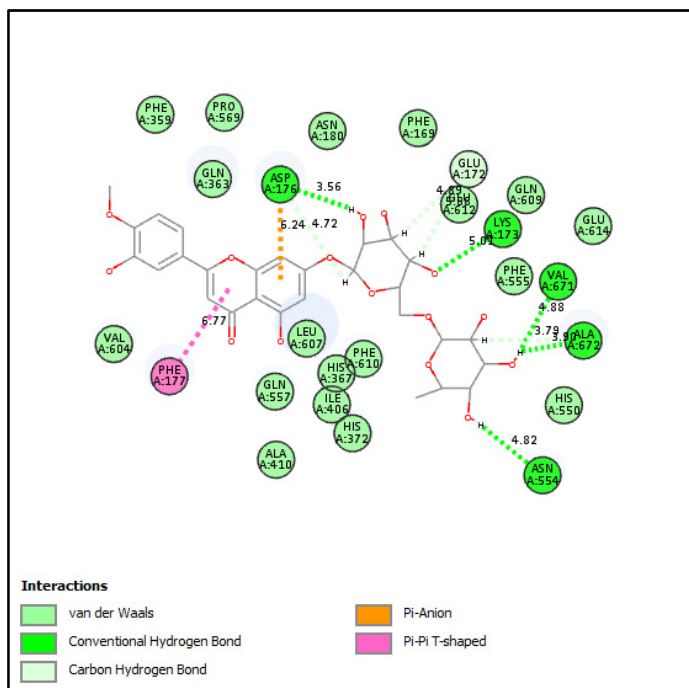
**Hyperoside (3)**



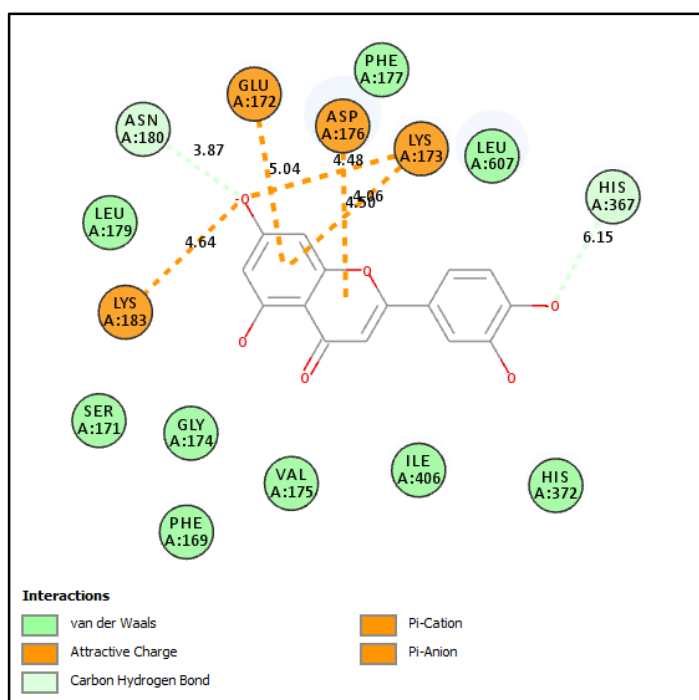
**Isoquercitrin (4)**



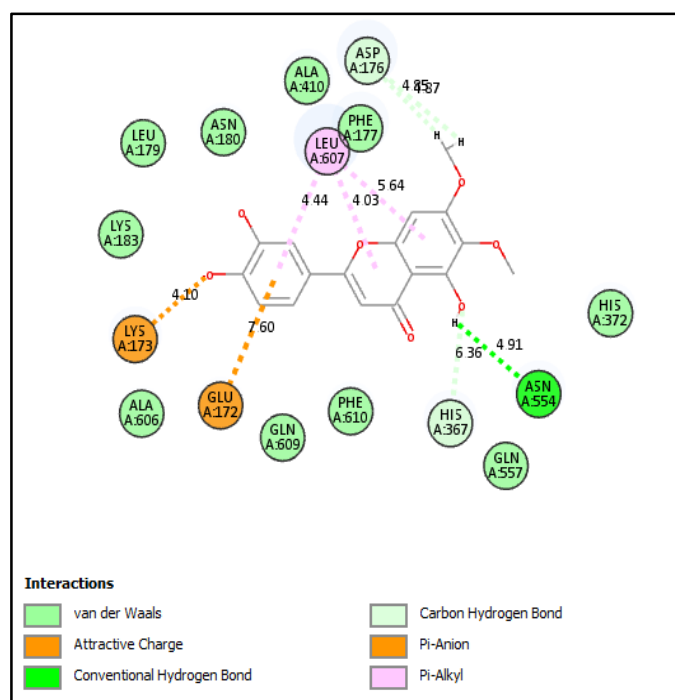
Luteolin 7-O- $\beta$ -D glucopyranoside (5)



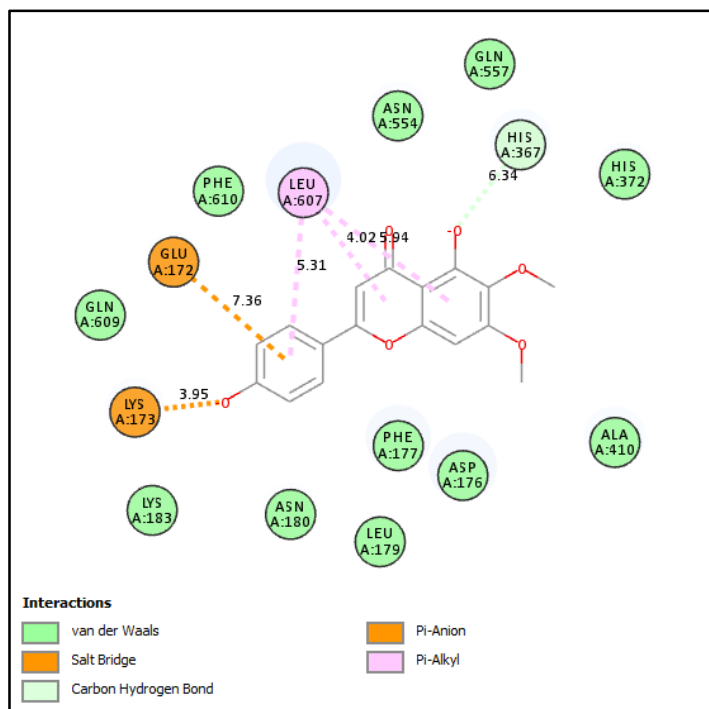
Diosmin (6)



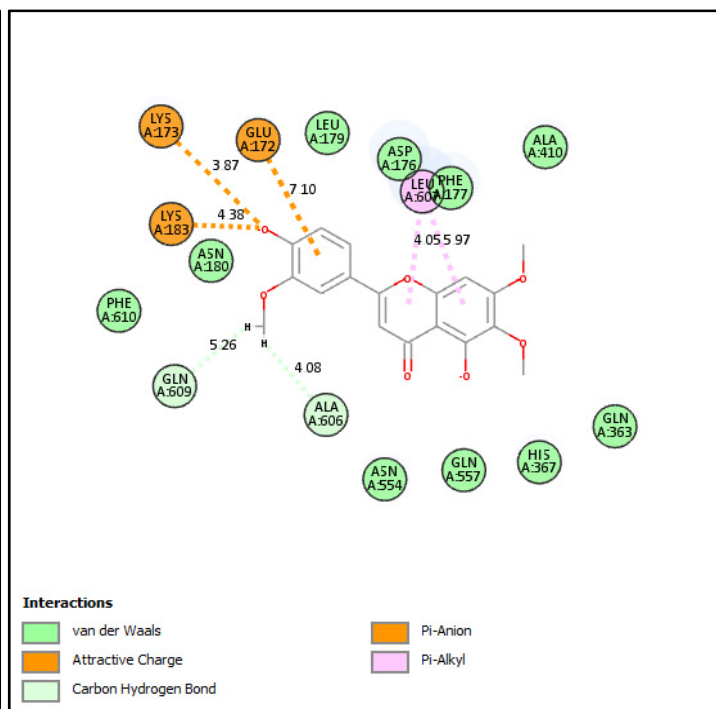
Luteolin (7)



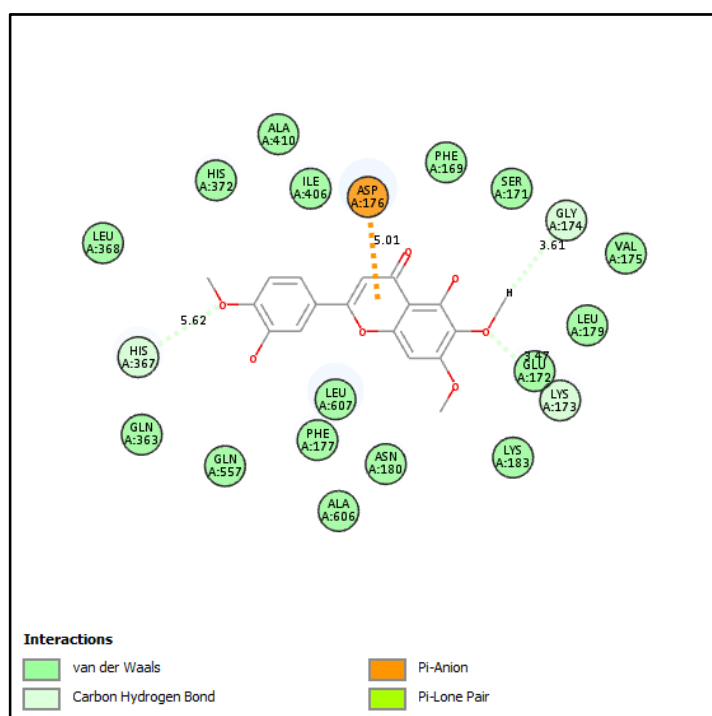
Cirsiolol (8)



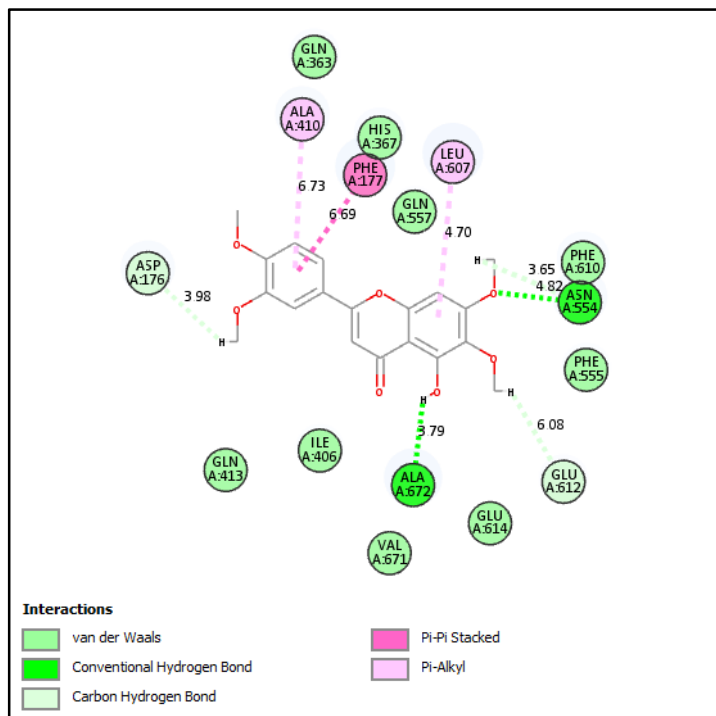
Cirsimaritin (9)



Cirsilineol (10)

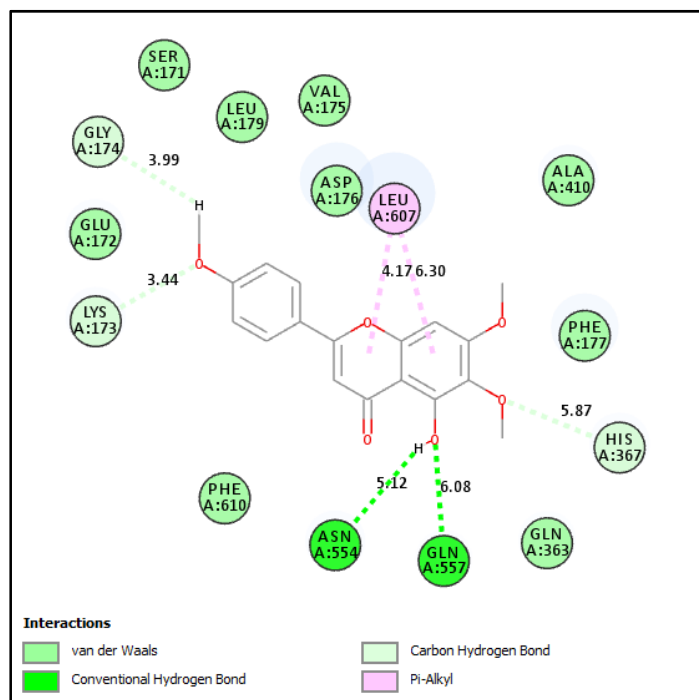


Eupatorin (11)

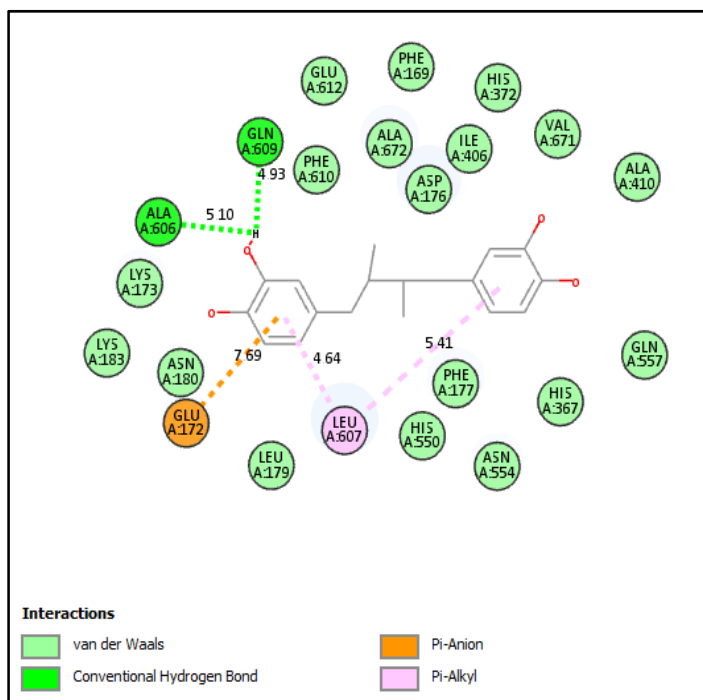


5-Desmethylinensetin (12)



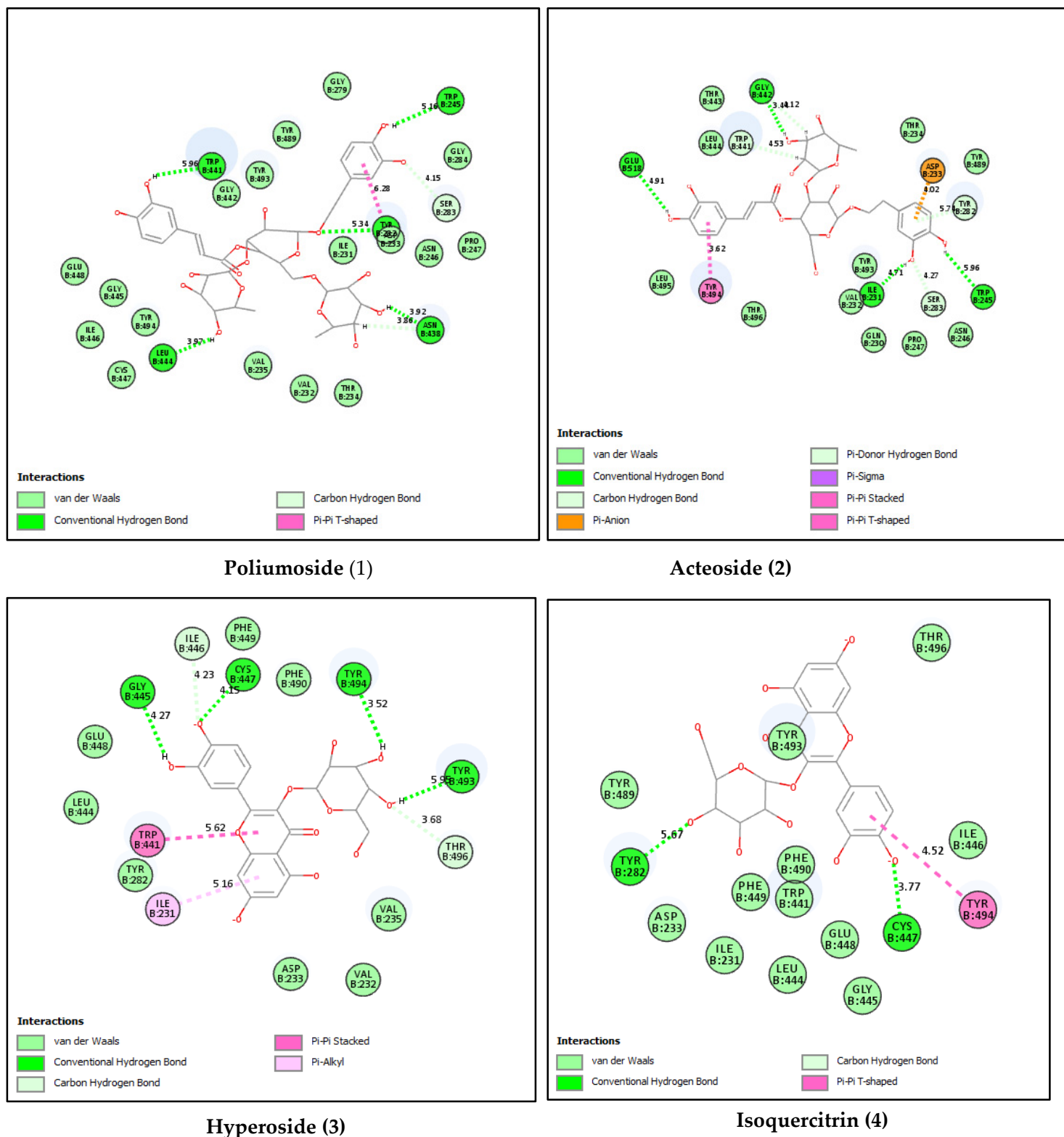


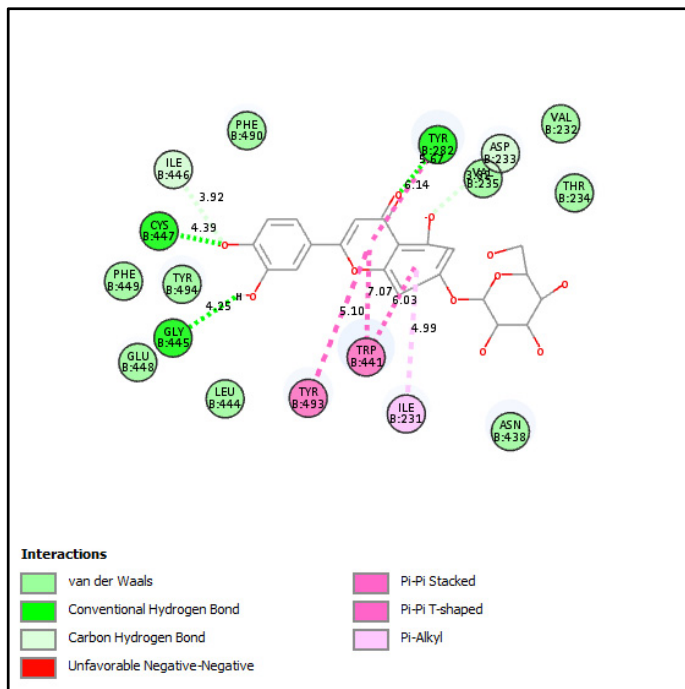
Salvigenin (13)



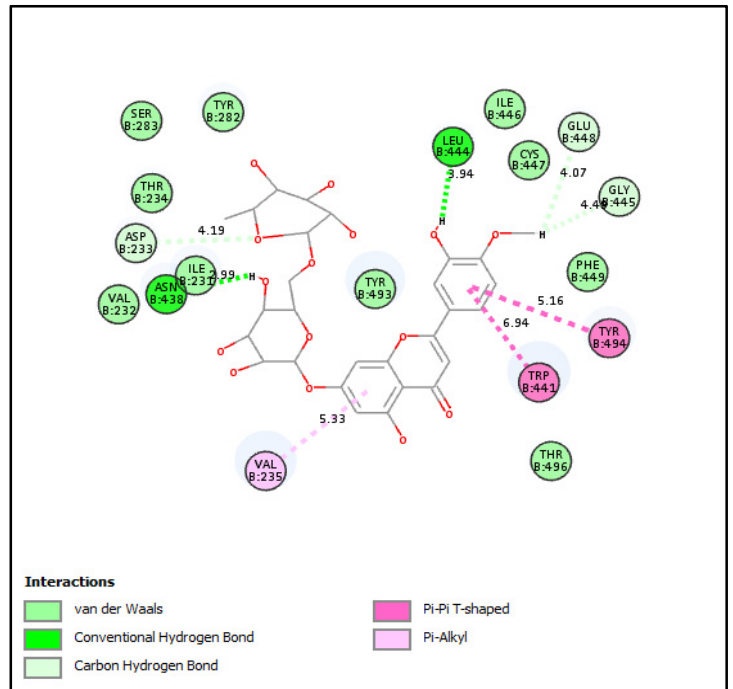
Nordihydroguaiaretic acid

**Figure S4:** 2D binding mode of compounds identified from Algerian *Teucrium polium* aerial parts inside the active site of acetylcholine esterase

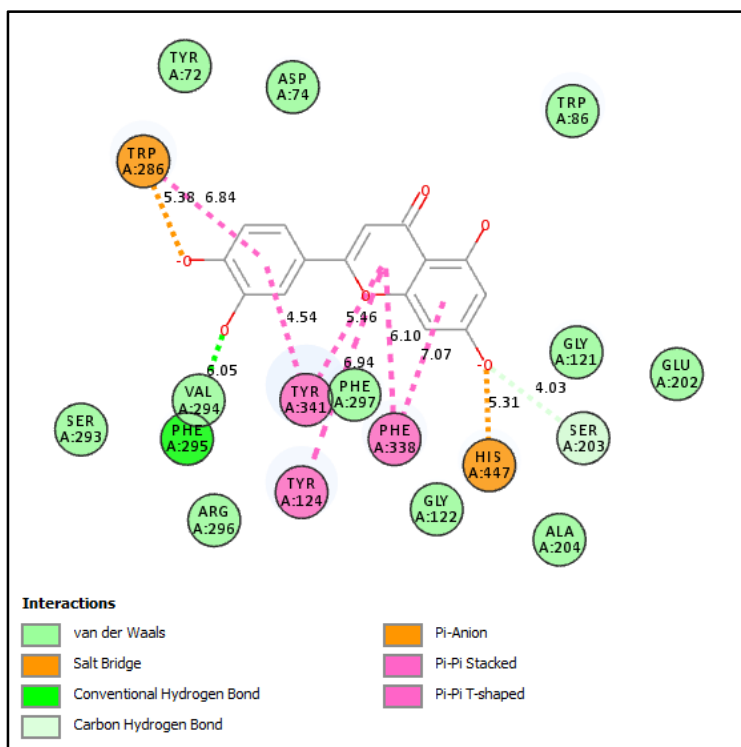




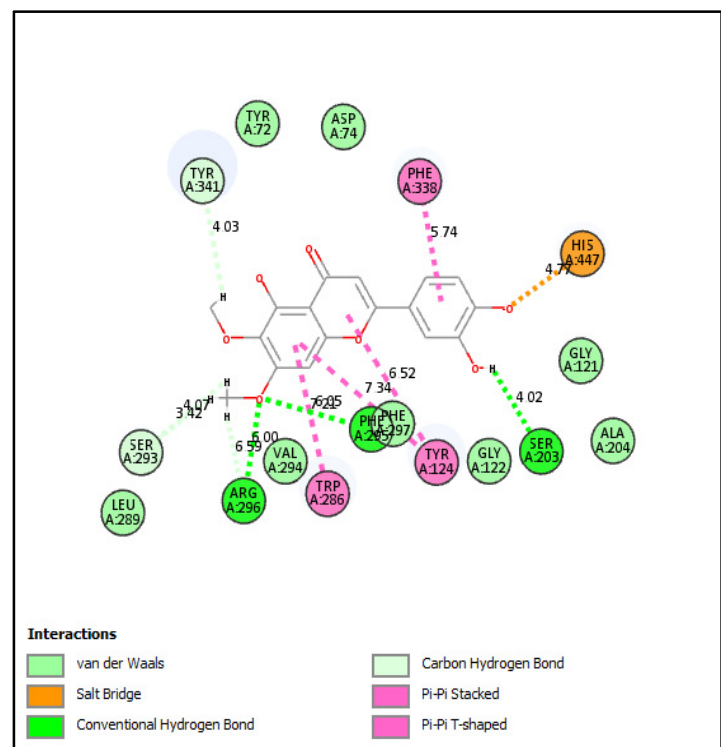
Luteolin 7-O- $\beta$ -D glucopyranoside (5)



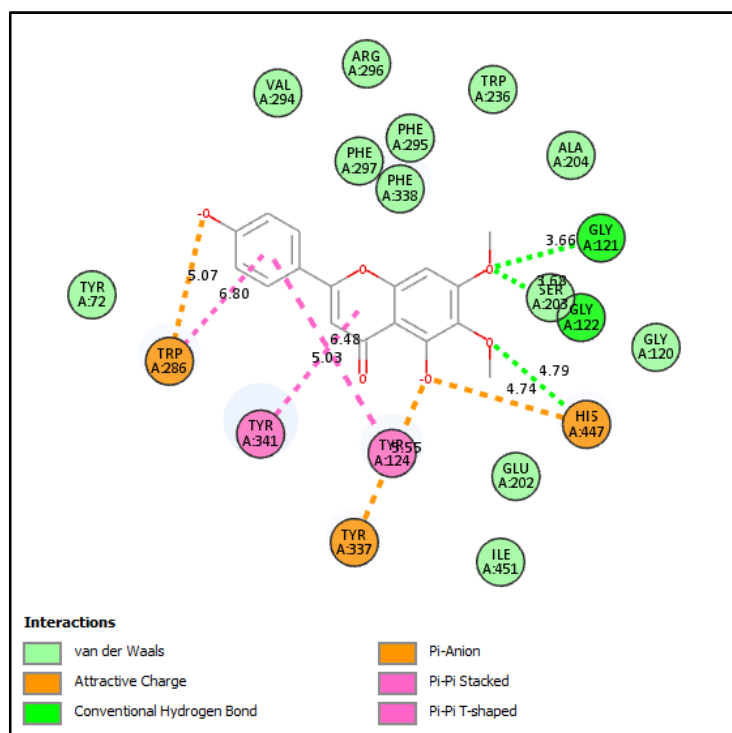
Diosmin (6)



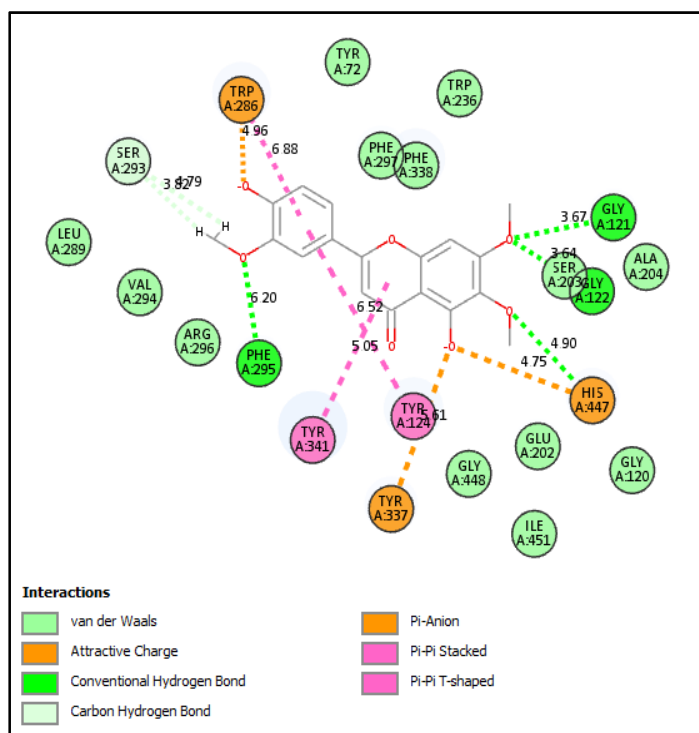
Luteolin (7)



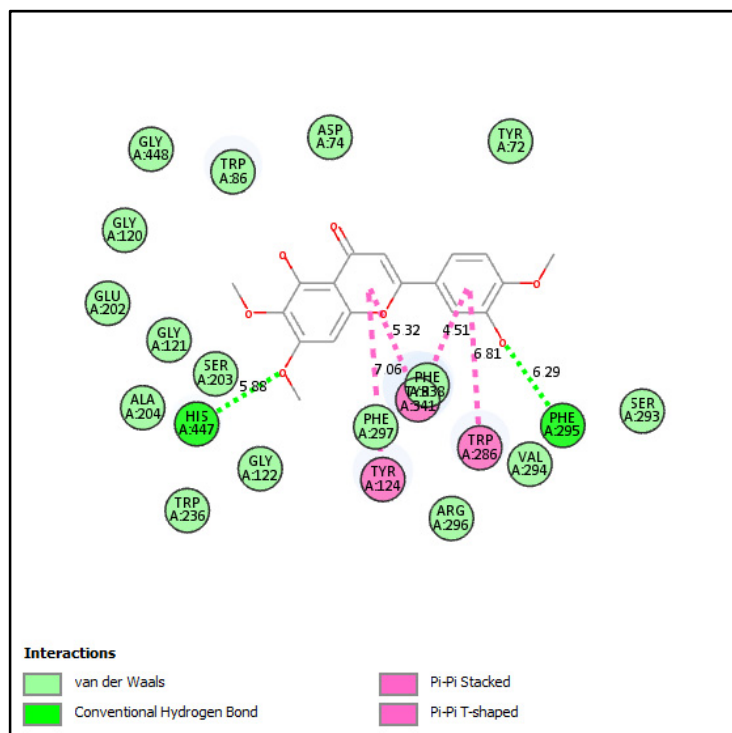
Cirsiolol (8)



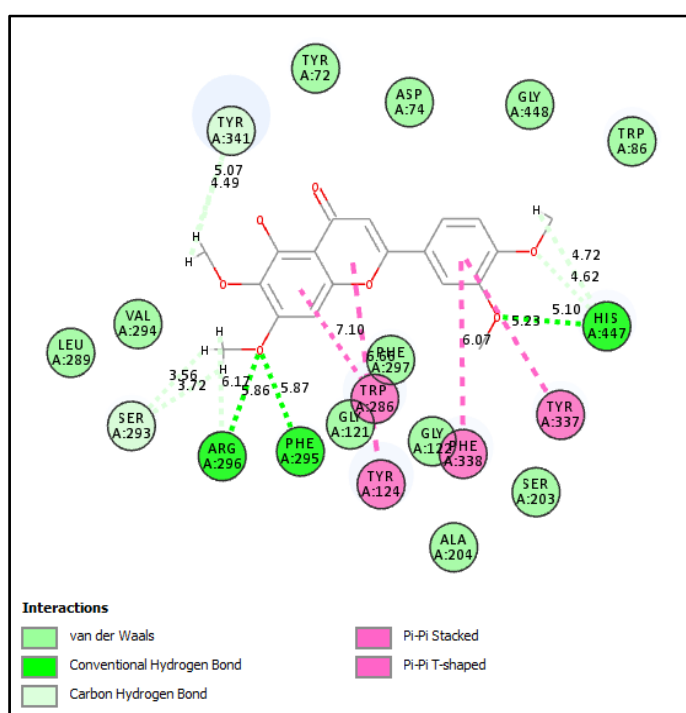
Cirsimaritin (9)



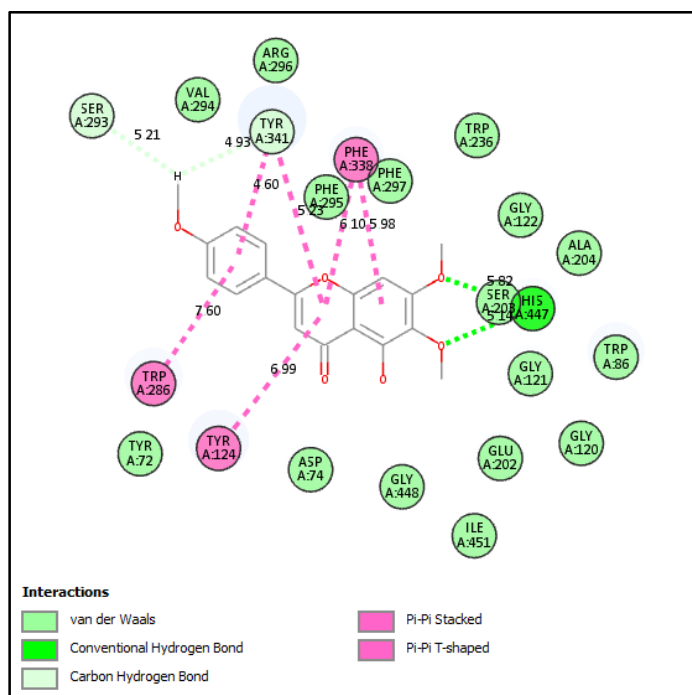
Cirsilineol (10)



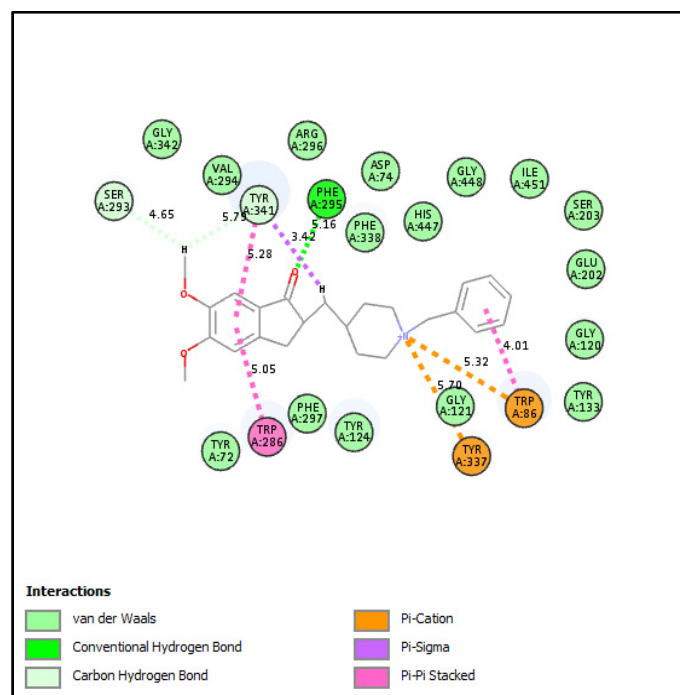
Eupatorin (11)



5-Desmethylinensetin (12)



Salvigenin (13)



Donepezil