**P-coumaric Acid**

P-coumaric acid increases the resistance with imidacloprid and keeps other villains at bay, because of their major role called as Colony Collapse Disorder. So far, we placed the bomb on our hero trained our hero with way of the IPTG; Our hero has a sidekick, who makes him MAZF - ANTIMAZF WITHOUT & WITH IPTG (TUBE) RIGHT PICTURE: one after another. This phenomenon is The Queen bee indeed needs a hero and we are going to give her the hero she deserves.

**The Hero’s Sidekick**

Our hero has a sidekick, who makes him stronger, helps him when he is fighting with imidacloprid and keeps other villains at bay. Our sidekick’s name is Sam8, and comes from an organism named Saccharothrix espanaensis. Sam8 codes the enzyme ammonia lyase, which converts tyrosine to p-coumaric acid, which increases the resistance of bees against... well... everything.

**Successful Mission**

So far, we placed the bomb on our hero successfully, BBA.K117006 (MacP) and trained our hero with way of the IPTGs BBA.K1197001 (Sam8). LEFT PICTURE: MAZF - ANTIMAZF without & with IPTG (PLATE) RIGHT PICTURE: MAZF - ANTIMAZF without & with IPTG (TUBE).

**Know Thyself**

We know that this motto, we tested our tools and our heroes' powers.

1) The aim of modeling P450 monooxygenase production is to predict the amount and activity of this enzyme, which will be produced according to our model.

2) The aim of modeling P-coumaric Acid production is to predict the amount and activity of this enzyme, which will be produced according to our model.

3) The aim of modeling P450 enzyme production is to predict the amount and activity of this enzyme, which will be produced according to our model.

**New Missions**

The most important mission is calling our hero, he must accomplish this mission to fulfill his destiny, his arch nemesis Imidacloprid is waiting for him, he must complete his training, equip his tools, get his sidekick and confront this super-villain.

**The League of Heroes**

Our hero is just one of many, there are more villains out there and many heroes are fighting against them. Our future goal is uniting these heroes under the same banner, creating the ultimate defense mechanism against colony collapse disorder.

**The Team**

METU TURKEY

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