BeeVital® Pollen Trap

The BeeVital pollen trap may be used with almost any kind of bee hive. Its dimensions fit on any kind of classical hive entrance and its connection to the hive is very simple requiring a hook installed on the front wall of the brood box. The bees enter the hive by walking on a metallic mesh that connects the pollen trap to the landing board of the hive.

The active plate is made out of high density polystyrene and covers the whole width of the hive entrance having 5 holes in vertical disposal. The high quality of the injection mold and of the raw material used allow a very precise calibration of the holes of 4.92 mm and there are no sharp edges on any part of the active plate that might wound the passing bees. A special feature of this active plate consists of horizontal ribs on the inside and outside of the plate. The function of an active plate of a pollen trap is to allow the passing of the bee through its holes but to retain the pollen balls attached to the back legs of the bee. Minute observation of the behavior of bees at the entrance of a hive provided with a pollen trap show that they can quickly learn how to carry the pollen into the hive through the holes of the active plate: the bee passes with its thorax through the hole and the front and the middle legs, then bends form the waste and carefully pulls the back legs, one by one, altogether with the pollen balls. The ribs of our active plate do not allow the bee to bend and thus it cannot avoid the “scraping” of the pollen from its back legs. Our tests show an increase of 30% of the collected pollen compared to a classical active plate.

The active plate may be flipped forwards for completely opening the entrance in the period when no pollen collection is desired. The pollen falling from the bees passes through a metallic mesh into a wooden drawer, large enough to collect about 300 g of pollen. It is provided with a stainless steel bottom mesh for a good ventilation of the pollen, diminishing the risk of funguses contamination due to its high moisture content. Two simple drone escapes are placed on the sides of the trap.