Frequency protector generator for honeybees

Sprawozdania

Informacje na temat projektu

FOG

Identyfikator umowy o grant: 836486

Strona internetowa projektu

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Projekt został zamknięty

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Data zakończenia
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Finansowanie w ramach
INDUSTRIAL LEADERSHIP - Innovation In SMEs

Koszt całkowity
€ 71 429,00

Wkład UE
€ 50 000,00

Koordynowany przez
RIMANEC SRO
Slovakia

Ten projekt został przedstawiony w...

Periodic Reporting for period 1 - FOG (Frequency protector generator for honeybees)

Okres sprawozdawczy: 2019-01-01 do 2019-06-30

Podsumowanie kontekstu i ogólnych celów projektu

The honey bee is in danger of death. The main problem is the excessive use of chemistry in agriculture, which has a lethal effect on bees. This weakens the condition of bees, so they are susceptible to various diseases and pests, where the priority belongs to the Varroa destructor. This tick is the most harmful parasite of bees in the world. It is also the main carrier of several viruses among hives. The presence and role of bees in nature is irreplaceable. It is also directly connected with our existence and therefore it is necessary to do everything in our power to save bees. The aim of our efforts is to help bees deal with ticks without the use of any chemicals that endanger our health, but also bees. The solution we are looking for is a frequency protector generator (FOG). Certain frequencies can have a positive but also a negative effect on living organisms in certain circumstances. Therefore, we are looking for frequencies that are unacceptable for ticks, but at the same time not threatening the bees. A frequency generator is a small device that is placed in a hive and transmits the frequency to the environment where the hive is located. The generated signal has specific resonant properties that cause the tick to ignite and destroy, prevent its propagation and reproduction. We are looking for a frequency that is efficient, harmless to bees and at the same time environmentally friendly. The application of such a solution will have such a consequence that no chemistry enters the hive environment and therefore it does not get into the honey we consume.

Prace wykonane od początku projektu do końca okresu sprawozdawczego oraz najważniejsze dotychczasowe rezultaty

Extension and completion of testing of honeybees colonies with FOG treatment

Testing of the FOG device takes place in 4 localities and in several bee colonies. We are primarily interested in the very influence of the generator on the bee colony. The methodology and method of

evaluating the results were developed by doc. Ing. Robert Chlebo PhD. We applied the principle of mutual comparison at each test site separately. There were 10 test families at each site, one of which was untreated, so that the condition and amount of ticks on the hive without intervention and treatment could be compared. On the remaining 9 hives, we gradually set different frequencies and allowed the hives to act for the required treatment time. Comparing the overall results from all 4 sites and 40 colonies, we concluded that some frequencies were approximately 65-75 percent successful. Testing will have to be continued as it is to date and it is not possible to determine unequivocally from the tests performed whether or not the use of FOG affects the fertility of the queen bee as well as the multiannual production itself. It is necessary to realize that with today's form of beekeeping, the life of the queen bee is limited to about 3-4 years.
Testing must continue. The performance of the device and its efficiency are not clearly confirmed, changes are constantly taking place on the device. We would like to avoid complications that could occur if we did not have relevant and unambiguous results of this research. That is why the serial production of FOG is postponed to a later period.
The next steps of research have several phases. The first is to continue to investigate the possible impact of the FOG device on the longevity and fertility of the queen bee. Today we already know that it will require testing the equipment for more than two years so that the results are unambiguous and demonstrable. At the same time, there is the issue of the demonstrable effectiveness of the facility and the associated certification and recognition of treatments from a veterinary and hygienic point of view. Therefore, I note that the FOG testing process is still ongoing and not complete.
Maybe our expectations in 2018 were more optimistic and we thought that the finalization of FOG testing would be around 2020, but now I see that we still need 2-3 years and also new people, new financial resources. Today's coronavirus situation doesn't help either.

Innowacyjność oraz oczekiwany potencjalny wpływ (w tym dotychczasowe znaczenie społeczno-gospodarcze i szersze implikacje społeczne projektu)

"The patent is a financially demanding matter and therefore we protected our solution at the Industrial Property Office by protecting the industrial design under no. PÚV 219-2017 filed on 13.10.2017. This is a so-called small patent. We had two years to apply for proper patent protection. However, we did not use this option for several reasons. One of them is the very fact that the device is constantly being innovated and we still do not feel that we are in the final version. The second reason is that our former employee is asserting patent claims, which will probably be a lawsuit, and to date we have no idea how it will turn out. Unfortunately, this is the reality. The third reason is the financial complexity of the whole process.
Therefore, our plan is to patent our ""new"" unquestionable solution as soon as the results of the impact on the queen bee are evaluated, so that we have 100 percent certainty that we are paying for something that will pay us back as an investment. The assumption of this step is for the year 2022.

The company's total project costs for the last three years are EUR 100,000. It is planned to complete research, testing, licensing and patent certificates in the next two years. The cost of this phase is estimated at EUR 150 000. Production documentation and start of production will be very expensive.

The company will need external financial resources in the form of a loan or an investor who will enter the company. The company will work on both variants. The expected start of production is 2022. For the years 2022 to 2024, the planned sales volumes of FOG are gradually 5,000 pieces, 10,000 pieces, 20,000 pieces.

Cashflow forecast:
Costs Sales Cashflow
Previous period 175.000 0 -175.000
2020 75.000 0 -250.000
2021 75.000 0 -325.000
2022 1.000.000 1.500.000 +175.000
2023 2.000.000 3.000.000 +1.175.000
2024 4.000.000 6.000.000 +3.175.000"

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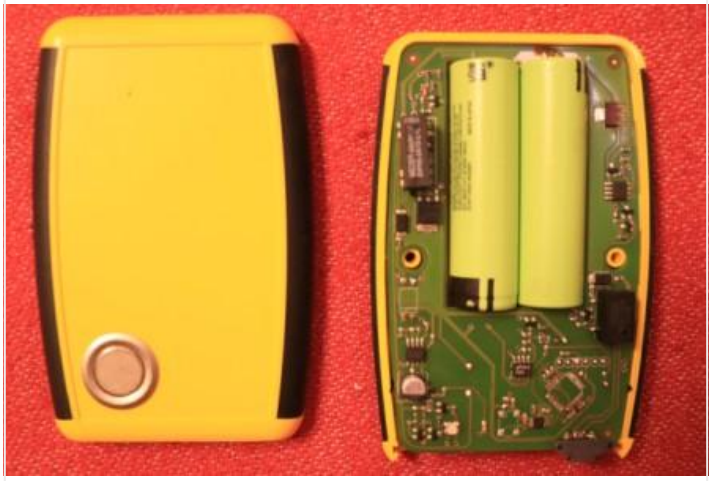

FOG generator

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