### Design of an energy efficient and low cost trap for Olive fly monitoring using a ZigBee based Wireless Sensor Network

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## Wireless Sensor Network Layout

The trap architecture is proposed to be scalable in terms of monitoring variables and number of traps





- Flytrap features:
  - Solar Powered
  - Easily installed/removed
  - Non-fixed Sticky position
  - Identification fly capabilities
  - Temperature and Humidity measurement
  - Sticky photography transmission for remote observation

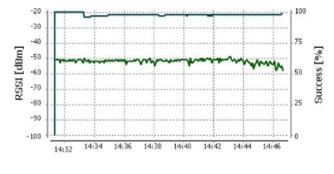


Spain January, 2015

# **WSN Pilot Implementation**

Power analysis ALL MAN THERE AN 1 0.9 0.8 Packet Received Rate 0.7 0.6 Ptx 1 0.5 Ptx 2 0.4 A Ptx 3 0.3 × Ptx 4 0.2 0.1 0 20 0 10 30 50 40 70 80 Link Quality Index (LQI)

#### Data Transfer Measurements





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