

A. florea colonies are more prone to be hunted for honey leading to destruction of colonies. Hence there is an urgent need to conserve the natural *A. florea* populations and establish a sustainable honey harvesting strategy in the semi arid regions.

A procedure has tested proven and practiced in some countries to keep *A. florea* brood area attached to the substrate after honey is harvested. Similarly, honey hunters in Hambantota have adopted a method for the same purpose. After carefully removing the honey stores the portion of the nest with brood is carefully attached to the original location using two metal wires without disturbance.

This procedure, adopted by the honey hunters, was experimentally tested for effectiveness. The experiment was conducted in the outer zone of the Bundala National Park, Hambantota where The *A. florea* colony density was determined to be 25 – 35 colonies per ha and found to cluster around moisture sources. During the honey season (February – May) in 2008 three colonies were selected with large honey stores. After slightly smoking on to the honey stores at the top of the comb, bees were pushed downward and brood comb was cut and detached. Out of three colonies one was tied with wires to a tree-branch next to the original substrate, the second colony was just suspended near the original site. The third was moved to a different location and suspended on a tree branch. First two colonies managed to settle under new conditions and found surviving even after one month. The third colony was attacked by the macaques after two days, a threat to *A. florea* colonies commonly found in the area.

These results prove that sustainable honey harvesting with *A. florea* is possible with the technique adopted by some of the honey hunters and hence awareness programs have to be launched to popularize and promote the use of technique in order to conserve the important bee species.

Keywords: *Apis florea*, semi - arid regions, *Prosopis juliflora* pollination, Sustainable honey harvesting

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Present Status of the Tsunami Affected Home Gardens: A Case Study at Madiha in Matara District, Southern Sri Lanka

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Inundation of sea water caused severe damages to home gardens resulting poor crop performances. As it is felt that the affected agricultural lands need to be rehabilitated to restore the production capacity, the present status of the soil in Tsunami affected home gardens at Madiha, Southern Sri Lanka was assessed. Sampling was carried out in late 2007 to early 2008 from randomly selected thirty home gardens. Representative samples were also drawn from neighboring unaffected gardens with the same soil type to be used as the reference. Major nutrients (N, P, K) which directly influence the factors driving crop growth and yield along with organic matter (OM) contents were analyzed using standard methods. In addition, attention was paid on measuring other properties such as electrical conductivity, pH, soil texture and bulk density.

Higher pH (8.29) and EC (6.48 dS/m) values recorded from the affected soils (compared to 6.78 and 1.2 dS/m for reference soils) could still have some negative impacts on crop productivity. However, the figures for organic matter content of affected (0.87 %) and non affected (1.06 %) soils revealed that considerable restoration has already taken place. The average N content of the affected soils was 0.21 % and the respective figures for P and K were 81.89 and 95.00 mg/kg of soil. The corresponding figures for the unaffected soils were 0.23 % (N) and 98.8 and 164 mg/kg of soil (P and K). The texture of soil is coming under loamy sand group according to the soil textural classification with the average bulk density of 1.4 g/cm³. Though, major remediation works are not needed, use of organic amendments, cultivate salt tolerant crop species/varieties etc. could be considered as the most appropriate measures that growers can adopt until successful rehabilitation is achieved.

Key words: tsunami, rehabilitation, home gardens, soil properties