Aedes aegypti Survey of West Himalayan Foothill Town of Haldwani, District Nainital, India

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The hilly regions in India exceeding an elevation of 500 metres are known to be free of Aedes aegypti infestation. Towns below this altitude in the foothills of the Himalayas show a very scanty population of the vector\(^1\). In the wake of the DHF outbreak in Delhi in 1996\(^2\), Haldwani town, situated in the foothills of the Kumoan hills in the western Himalayas, reported two cases of dengue fever in 1996. Alarmed by this incidence, a rapid survey of Aedes aegypti, the vector of DF/DHF, was undertaken in Haldwani to determine the receptivity of the town to DF/DHF during the peak of the rainy season in August-September 1997.

The studies were restricted to four urban localities, namely, Gurunanakpur, Gobindpura, Subash Nagar and Avas-Vikas Colony. The results of the survey are given in Table 1.

Table 1. Results of Aedes aegypti survey in Haldwani town during August-September 1997

<table>
<thead>
<tr>
<th>Locality</th>
<th>House Imp.</th>
<th>Gurunanak-pura</th>
<th>Gobind-pura</th>
<th>Subash Nagar</th>
<th>Avas-Vikas Colony</th>
</tr>
</thead>
<tbody>
<tr>
<td>House Index (HI)</td>
<td>-</td>
<td>51.3</td>
<td>64.2</td>
<td>22.6</td>
<td>8.7</td>
</tr>
<tr>
<td>Container Index (CI)</td>
<td>-</td>
<td>48.8</td>
<td>54.5</td>
<td>16.7</td>
<td>8.3</td>
</tr>
<tr>
<td>Breteau Index (BI)</td>
<td>-</td>
<td>143.5</td>
<td>191.00</td>
<td>47.9</td>
<td>11.2</td>
</tr>
</tbody>
</table>

The highest larval indices were recorded in Gobindpura, a central locality, and followed by Gurunanakpura, Subash Nagar and Avas-Vikas Colony, the peripheral-most area. The highest level of breeding was detected in old/used tyres (51.5%), followed by evaporation coolers (41.8%), pitcher mudpots (34.60%), drums...
and buckets (22.8%), discarded bottles (19.1%), cement tanks (14.5%), and flower pots (4.1%).

The findings highlighted that the town maintains a high receptivity level for DHF, as it is an important rail and road-head for the Kumoan hills and is prone to high volumes of traffic (both men and material) from areas in the plains with endemic DF/DHF.

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**References**
