Hatching environment can impact whole broiler life

Figure 1 - Dust levels (PM10; mg/m³) in a hatcher compared to dust levels in a broiler house with on-farm hatching during the last three days of incubation.

Table 1 - Technical results of 3 flocks with on-farm hatching in broiler floor houses compared to reference flocks in standard hatching systems.

<table>
<thead>
<tr>
<th>Cycle</th>
<th>On-farm</th>
<th>Reference</th>
<th>Hatch of fertile eggs (%)</th>
<th>Mortality (%)</th>
<th>Slaughter weight (g)</th>
<th>Average growth (g/day)</th>
<th>Slaughter age (days)</th>
<th>FCR</th>
<th>PEF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>97.1</td>
<td>94.7</td>
<td>2.9</td>
<td>3.5</td>
<td>2,455</td>
<td>61.0</td>
<td>40.2</td>
<td>1.55</td>
<td>383</td>
</tr>
<tr>
<td>2</td>
<td>97.5</td>
<td>97.3</td>
<td>1.7</td>
<td>2.6</td>
<td>2,453</td>
<td>63.8</td>
<td>38.4</td>
<td>1.45</td>
<td>432</td>
</tr>
<tr>
<td>3</td>
<td>97.1</td>
<td>96.7</td>
<td>4.4</td>
<td>5.4</td>
<td>2,352</td>
<td>58.2</td>
<td>40.4</td>
<td>1.59</td>
<td>351</td>
</tr>
</tbody>
</table>

1 Mortality in all flocks includes second grade chicks, commonly removed in the hatchery.

2 PEF; Production Efficiency Factor = (Slaughter weight (g) x 100 - mortality (%)) / [(Slaughter age (days) x FCR) / 10]

3 Flocks within each cycle came from the same broiler breeder flock and the same incubator. Reference flocks were hatched at a commercial hatchery and on-farm flocks were hatched inside the broiler house. The broiler chickens for both hatchery systems were housed at the same farm in different houses and received similar management, feed, and water.