



**Figure 2.** Sociogram of colony 1. Graphic representation summarizing the behavioural profiles of the groups obtained by clustering. The groups numbered 1 to 6 are placed in columns whose widths are proportional to the size (number of individuals) of the group. The 10 behaviours are placed in rows in which frequency histograms are located according to a standard scale. The horizontal dotted lines indicate the mean frequency corresponding to the percentage of each activity out of the total observed behaviours (shown on the right). The parts of the histogram below the dotted lines are shaded grey, while the above parts are black. This representation makes easier the visualization of the results, and allows one to describe the dominant or characteristic behaviours in each group.

### *Activity rhythms*

The frequencies of most behavioural acts did not differ noticeably across the circadian period. Tending and foraging activities, however, varied importantly. Caring for larvae by workers predominated during the period 0000–0900 h and attention to cocoons tended to increase as larval care diminished (Fig. 4). Foraging behaviour, which occurs nocturnally in the field, peaked during the 1500–1800 h period, somewhat earlier than in nature. This probably related to laboratory conditions.

### *Brood recognition experiment*

The order in which the 20 marked nestmate (*N*) and non-nestmate ('alien'-*A*) larvae were carried into the experimental nest tubes was random:

Colony 1: ANANNAANNANANAANANNA  
Colony 2: ANANANNANANANAANNANA