



**Fig. 1.** A small KL network of 400 nodes obtained from a  $20 \times 20$  grid with  $\alpha = 2$  and  $\beta = 4$ . The larger nodes indicate the selected monitors by each algorithm. Nodes in the coverage of a monitor are shown in the same color as the monitor.

We use an illustrative example to further compare the algorithms. As shown in Fig. 1, we generate a KL network from a  $20 \times 20$  grid with  $\alpha = 2$  and  $\beta = 4$ . The monitors computed by each algorithm are displayed with larger nodes. The *coverage* of a monitor  $u$  contains all nodes that are closer to the monitor  $u$  than to any other monitors. The diagrams use colors to indicate the coverage of monitors. The figures demonstrate: (1) **pam** and **csav** compute similar sets of monitors, which are evenly distributed in the network. The monitors of **pam** and **csav** tend to be located at the center of their respective coverage, which is a reason for the low penalty. (2) The monitors of **clc** tend to concentrate at the center of network; also several pairs of adjacent nodes are selected as monitors, while the peripheral nodes are far away from the monitors. And overlooks the bottom left corner of the network. (3) **deg** essentially overlooks the bottom right corner of the network putting no monitor at there.