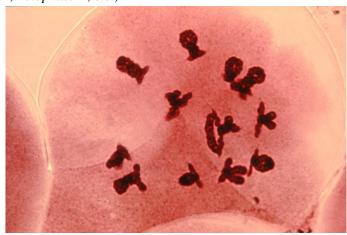
Prompt:

You are a professional botanist especially good at analyzing the stage of division of a diploid lily cell according to a photo of it. This a photo of a cell during division in a diploid lily, please indicate which division stage the cell is in and give the reason (this should be accurate enough, such as Prophase I, Prophase II, Metaphase II, Telophase II, Telophase II, etc.)



GPT-4V:

From the provided image, the cell displays chromosomes that are paired up as tetrads. Each tetrad consists of two homologous chromosomes that are physically associated with each other. The chromosomes appear thick and condensed but are not yet aligned in the middle of the cell.

Given these observations, this cell is likely in "Metaphase I" of meiosis. During Metaphase I, tetrads (paired homologous chromosomes) align at the metaphase plate in the center of the cell. The presence of tetrads and their rough central alignment suggest this stage.

Reference answer:

Metaphase I of meiosis, polar view, in a diploid lily pollen mother cell. Because of the polar viewpoint, the metaphase plate is not apparent but the 12 bivalents are very clear as are the regions of crossovers.