Cytoplasmic microtubules are distributed widely in the mature accessory reproductive glands of the male desert locust. They are not concentrated in any particular region of the cytoplasm, but they appear to be closely associated with mitochondria and the Golgi apparatus. The individual microtubules have a helical configuration, and they are often congregated in bundles. It is suggested that the microtubules arise from Golgi regions, and that they function as a scaffolding for the maintenance of the shape of the glandular cells.