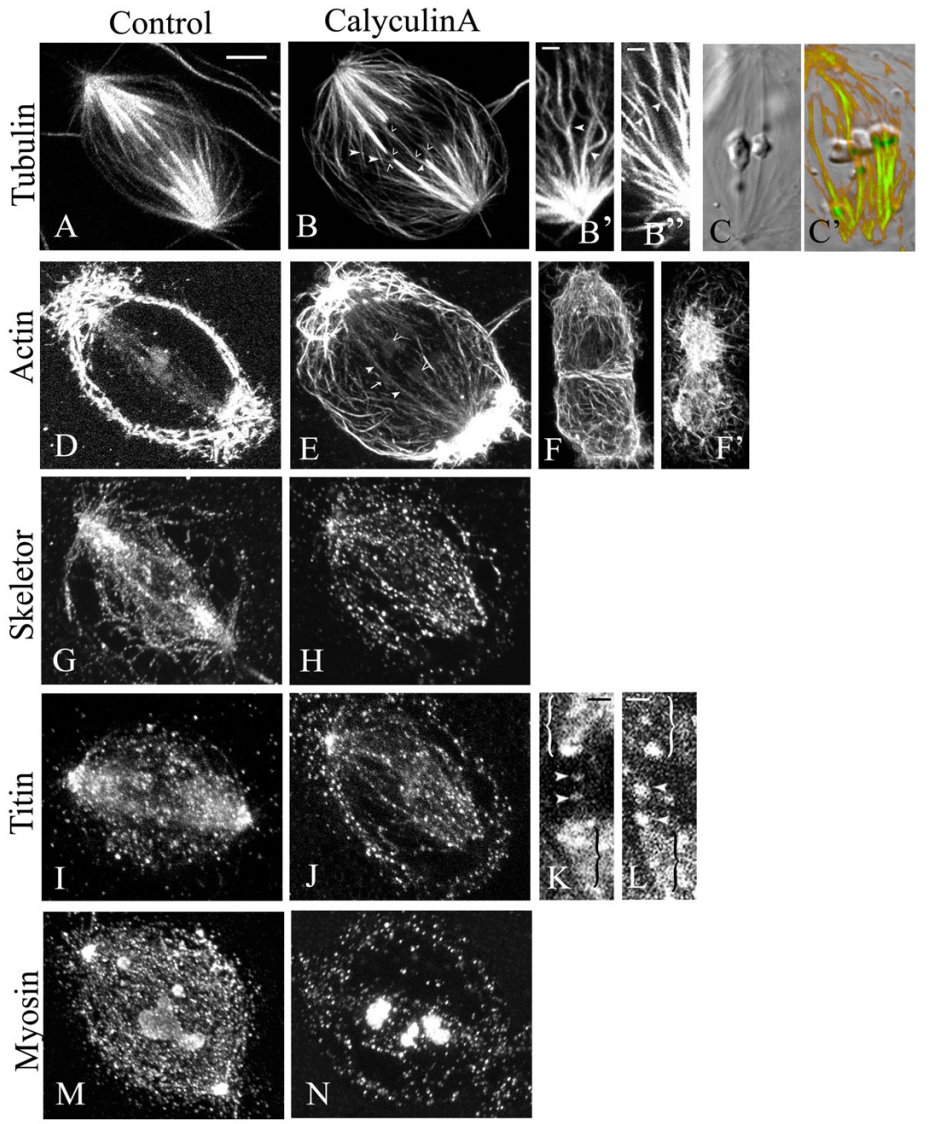

Figure 6
Distribution of various spindle proteins in crane-fly spermatocytes. Control spermatocytes are illustrated in (A,C,D,F,G,I,K,M). Calyculin-treated spermatocytes are illustrated in (B,B',B",C',E,F',H,J,L,N). **(A)**: Fluorescence image of tubulin distribution in a control cell in early anaphase. (**B, B', B"**): Fluorescence images of tubulin distribution in CalA-treated cells in early anaphase (B) and metaphase (B',B"). Individual microtubules "peel off" from the kinetochore bundles (arrowheads), split along their length and surround the chromosomes (open arrowheads) after CalA treatment. **(C)**: DIC image of a control spermatocyte showing kinetochore spindle fibres terminating at the kinetochores. **(C'):** Fluorescence image merged with the DIC image (orange-green) showing that CalA added during prometaphase causes chromosomes to loose attachment to the spindle fibres. **(D):** Fluorescence image of filamentous actin distribution in a control cell in metaphase.**(E):** Fluorescence images of filamentous actin distribution in a CalA-treated cell in early anaphase. Actin filaments become more prominent in the kinetochore fibres. Two half-bivalents from the same autosomal pair (open arrowheads), one univalent sex chromosome (arrow) and sex chromosome spindle fibres (closed arrowheads) are indicated **(F)**: Fluorescence image of a control cell in cytokinesis. **(F')**: Fluorescence image of a cell in cytokinesis after CalA treatment. CalA causes formation of actin aggregates in the mid body. **(G, I, M):** Fluorescence images of skeletor (G), titin (I) and myosin (M) in control cells in prometaphase. **(H, J, N)**: Fluorescence images of skeletor (H), titin (J) and myosin (N) in CalA-treated cells. There is less of these proteins in the spindle region. **(K,L)**: Titin is present in the interzone (arrowheads) between the arms of separating half-bivalents (arrows), both in control cells (K) and in CalA-treated cells (L). Scale bar in A (for panels A-J, M-N) = 5 μm. Scale bar in (B',B",K,L) = 1 μm.