

学 位 論 文 の 要 旨

三 重 大 学

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<p>主論文の題名</p> <p>Inhibitory effects of kaempferol, quercetin and luteolin on the replication of human parainfluenza virus type 2 <i>in vitro</i></p> <p>主論文の要旨</p> <p>The eight flavonoids, apigenin, chrysin, hesperidin, kaempferol, myricetin, quercetin, rutin and luteolin were tested for the inhibition of human parainfluenza virus type 2 (hPIV-2) replication. Three flavonoids out of the eight, kaempferol, quercetin and luteolin inhibited hPIV-2 replication.</p> <p>Kaempferol reduced the virus release (below 1/10,000), partly inhibited genome and mRNA syntheses, but protein synthesis was observed. It partly inhibited virus entry into the cells and virus spreading, and also partly disrupted microtubules and actin microfilaments, indicating that the virus release inhibition was partly caused by the disruption of cytoskeleton. Quercetine reduced the virus release (below 1/10,000), partly inhibited genome, mRNA and protein syntheses. It partly inhibited virus entry and spreading, and also partly destroyed microtubules and microfilaments. Luteolin reduced the virus release (below 1/100,000), largely inhibited genome, mRNA and protein syntheses. It inhibited virus entry and spreading. It disrupted microtubules and microfilaments. These results indicated that luteolin has the most inhibitory effect on hPIV-2 replication. In conclusion, the three flavonoids inhibited virus replication by the inhibition of genome, mRNA and protein syntheses, and in addition to those, by the disruption of cytoskeleton <i>in vitro</i>.</p>			