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現在の研究 : 昆虫ホルモンを中心とする生物制御化学研究
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現在の研究テーマ:

昆虫の脱皮・変態の過程における昆虫ホルモンの活性発現・分解に関与するタンパクの性質を生物有機化学的に明らかにし、その遺伝子を解析するとともに、活性発現制御機構を解明する。

1. 幼若ホルモン (JH) に関する

- A. JH エステラーゼ …論文 84, 80, 72, 60, 57, 53, 40, 34, 32, 27
- B. JH エポキシドヒドローゼ …論文 54, 51
- C. カイコ JH 結合タンパク …論文 97, 63, 59, 47, 28
- D. JH 生合成・脂質修飾酵素 …論文 58, 29
- E. 昆虫生理とウイルス感染個体との関係 …論文 71, 39, 36, 33

2. 昆虫生育制御剤に関する

- F. イミダゾール系成長制御化合物 KK-42 の作用点…論文 37, 30, 24
- G. 新規昆虫生育制御剤の検索 …論文 94, 61, 56, 45, 44, 41, 35, 26, 25
- H. ミトコンドリア膜タンパク質の機能と阻害 …論文 88, 82, 79, 78, 75, 70, 68, 67

3. 昆虫内分泌機構に関する

- I. JH の関わる内分泌制御 …論文 95, 93, 91, 90
- J. カイコ Ras と新規核内レセプターの遺伝子と機能解析 …論文 50, 48, 31
- K. JH とエクジステロイドの定量法 …論文 62, 42, 38
- L. バッタの相変異制御機構 …論文 92, 89, 86, 83, 81, 79, 76, 73, 69

4. 昆虫の解毒代謝酵素と殺虫剤抵抗性に関する

- M. カルボキシル／コリンエステラーゼ …論文 87, 55, 52, 49, 46, 43, 23
 - N. グルタチオン-S-トランスフェラーゼ …論文 77, 74, 66
 - O. 抵抗性の機構解明 …論文 85
5. その他 …論文 96 (ネオニコチノイド), 65 (DNA 修復機構), 64 (フェロモン受容機構)

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