

In memoriam of Doc. RNDr. Ivan Hrdý, DrSc.

Dr. Ivan Hrdý was born on 21 October 1928 in Olomouc (Middle Moravia, Czech Republic). His father was a secondary school teacher. Ivan attended the grammar school and later the secondary school in Olomouc., and the first year of the Faculty of Natural Sciences of Palacký's University at Olomouc. After the first year he entered the Faculty of Science of Charles University in Prague where he continued in his studies of zoology and entomology at the Institute of General Zoology and Entomology under the leadership of Prof. Julius Komárek. He specialized in entomology. At that time a group of young entomologists started studying the repeated outbreaks of cockchafers (*Melolontha melolontha* and *Melolontha hippocastani*). These outbreaks occurred in Moravia every three or four years. The objective of these studies was to devise methods of destroying the population of cockchafers without simultaneously damaging the ecosystem and killing other beneficial insects. During these experiments only the borders of oak stands were affected by the HCH (hexachlorocyclohexan) used. Ivan Hrdý continued and worked later on other similar problems. He investigated the possibility of using this insecticide against the Colorado potato beetle (*Leptinotarsa lineata*). This pest, originating from North America, appeared in Europe – first at Bordeaux in France – during the first world war between the years 1918–1921. This serious pest appeared at the western border of Czechoslovakia in the year 1945 and quickly spread to the east. At the end of 1960 it occupied the whole of Czechoslovakia and was spreading at a rate of about 150 km per year.

The scientific career of Ivan Hrdý started in 1953 when he finished his university studies (RNDr). In 1968 he became a lecturer (docent) in applied entomology at the Czech University of Life Sciences, Prague (Česká zemědělská univerzita, Praha-Suchbát) and in 1983 he obtained the title DrSc.

In 1954 the Czechoslovak Academy of Sciences established the Laboratory of Entomology, which in 1962 became the Institute of Entomology. It included at that time several departments. Ivan Hrdý founded the Department of Toxicology in this institute and was appointed its head. In 1985 he joined, together with all the research workers in his department, the Institute of Organic Chemistry and Biochemistry in Prague (ÚOCHAB), where he led the Laboratory of Chemical Ecology of Insects until 1992 and continued his studies on the resistance of various species of insects till his death in January 25, 2010.

In 1962 Ivan Hrdý together with his collaborator Johana Hůrková demonstrated that the Colorado beetle (*Leptinotarsa decemlineata*) was starting to become resistant to the insecticide DDT, which was used to control this insect at that time. As a result of this discovery the treatment of *Leptinotarsa decemlineata*



changed importantly: dangerous insecticides that adversely affected all the insects occurring in potato fields and also the soil fauna were replaced by other insecticides.

Two years later he demonstrated together with another of his collaborators, Jiří Zelený, the so called cross resistance of aphids to organophosphate and carbamate insecticides, which were used to control aphids damaging hop cultures, which is an important agricultural crop in the Czech Republic.

Ivan Hrdý was an outstanding scientist who was able to establish very good collaboration with colleagues not only in his department but also in other institutes in the Czech Republic. In the Department of the Institute of Organic Chemistry and Biochemistry the following workers can be named: J. Vrkoč, J. Romaňuk, J. Svatoš, V. Jarolím, V. Hoskovec, M. Vimmer, L. Kalvoda, B. Kalinová and K. Konečný; in his own Department of Toxicology and Chemical Ecology: J. Ždárek, J. Hůrková, M. Hlináková, O. Hovorka and J. Kuldová; in the Institute of Entomology: J. Zelený, F. Weyda, S. Matolín, K. Spitzer, V. Skuhřavý, F. Sehnal, V. Němec and B. Bennettová; in the Institute of Plant Protection, Praha: F. Kocourek, J. Beránková, J. Svatošová, M. Stará and J. Šedivý; in the Czech and Slovak Institutes of Forestry: J. Patočka and R. Hochmut. He cooperated with F. Krampfl of the Department of Entomology of the National Museum in Prague, with J. Kříž of the Hop Research Institute in Žatec, and with many other research workers: V. Kneifl, J. Marek, J. Hrdá, D. Škrobal, J. Křeček, V. Rupeš and others.

Ivan Hrdý devoted his research activities to the problems of pheromones. He started his studies on the codling moth (*Carpocapsa pomonella*), the pest of apples, and continued with studies in orchards on other moths damaging fruit, viz. *Cydia pomonella*, *Cydia molesta*, *Cydia funebrana* and also on the horse chestnut leaf miner (*Cameraria ohridella*) damaging leaves of horse chestnut trees.

Research activities of Ivan Hrdý were very broad. He carried out studies on juvenoids and pheromones, including trials and experiments not only in the laboratory but also in hop plantations, vineyards, orchards, forest stands and alfalfa fields.

Ivan Hrdý was the pioneer of studies on pheromones and juvenile hormones in the Czech Republic. He had a good relationship with the American scientific firm Zoecon at Palo Alto in California, which mainly produces pheromones. In his studies Ivan used codlemone, the pheromone used to attract *Carpocapsa pomonella*, to clarify the bionomics, ecology and ethology of this pest in orchards. Later on he broadened his trials to include several other butterflies occurring on apple trees in the Czech Republic. He had good contacts with all the specialists working on pheromones in the USA and Europe, mainly Dr. Priesner of the Max Planck Institute in Seewis (Germany) and Prof. Lüscher and others. Dr. Priesner may be considered to be a human victim of pheromone research. He studied the use of pheromones in the Alps and did not return from a trip to examine his pheromone traps. Ivan obtained very good results using pheromone traps in alfalfa (*Medicago sativa*) fields.

Ivan Hrdý was the first in the Czech Republic to study the control of termites (Isoptera) for use in the wood industry. At the beginning it was necessary to prepare breeding rooms and collect species of termites for trials. He undertook several journeys to collect termites, first in Europe – in Serbia and Croatia, the former Yugoslavia, then in Asia (China, India) and North America (California, USA) and Cuba. He founded a large collection of species of termites for studying the influence of pheromones and juvenoids.

At that time an alien species of ant, *Monomorium pharaonis*, appeared in Europe. This small ant originated from Egypt, appeared suddenly in large numbers and was very dangerous mainly in new buildings and hospitals. Ivan Hrdý together with colleagues at other institutes prepared a baited lure called „Lafarex“, which liquidated this pest in the Czech Republic. He used also the JH Analogues for differentiation of the casts in termites.

Ivan Hrdý was invited and worked as an expert in the Republic of Cuba, where he studied the Sugarcane moth (*Diatraea saccharalis*) of the family Crambidae. At that time twelve other Czech entomologists worked there on various problems. Ivan took part also in the production of six films with the themes devoted to natural history and life history of various animals.

Ivan Hrdý was a member of the Czech Entomological Society and during the years 1990–1997 he was its president. In 2004 he was appointed a honorary member of this scientific society. He was also a member of the Czech Zoological Society and in 1995 was elected a fellow of the Royal Entomological Society of London. He was a member of the editorial boards of the *European Journal of Entomology* (1993–1997), *Acta Entomologica Bohemoslovaca* (editor 1957–1992) and *Plant Protection Science* (former *Ochrana rostlin*), *Praha*.

Ivan Hrdý was an outstanding entomologist who worked in the fields of general and applied entomology. He is the author of more than 170 scientific works and about 200 popular scientific articles devoted to various topics of entomology, toxicology and biology. He was the editor or author of nine books and proceedings of various conferences. His scientific activities were recognized by the award of three medals: The Golden Medal of Gregor Mendel (1988, the Czechoslovak Academy of Sciences), the Medal of J. E. Purkyně and the Medal of the Czechoslovak Academy of Agricultural Sciences for his contribution to agricultural sciences (1988). In his last years he was a research worker emeritus at the Institute of the Organic Chemistry and Biochemistry in Prague.

He organized and took part in congresses and conferences and was several times invited to lecture not only in the Czech Republic but also abroad (Cambridge, 1971, and Italy 1989).

The following three taxa were named to honour Ivan Hrdý:

- *Hypoaspis hrdyi* Samšišák, 1961, a thermophilous species of mite (Acarina);
- *Cyphoderus hrdyi* Rusek, 1971, a species of springtail (Collembola);
- *Trichocovina hrdyi* Mass et Radek, 2006, a protozoan living in the gut of the termite *Neotermes cubanus*.

Ivan Hrdý met his future wife Jitka during his university studies. They married in 1954. Jitka Hrdá is a specialist in mathematics and statistics and helped her husband with statistical evaluations of the results he obtained during the course of his investigations in ecology. They have two children. Their daughter Judita Hrdá (born in 1958) is an ethnologist at the Institute of Ethnology in Prague and their son Ivan Hrdý junior (born in 1963) is an associate professor of parasitology at Charles University, Prague.

All colleagues in the Czech and the Slovak Republics and friends from abroad will remember Ivan Hrdý at all times for his ability to help and cooperate and his friendly nature.

REFERENCE

- JASÍČ J. 1989: K šedesátinám doc. RNDr. Ivana Hrdého, DrSc. [To the sixtieth of doc. RNDr. Ivan Hrdý]. *Ochrana Rostlin* **25**: 29–30.

BIBLIOGRAPHY

Original Papers and Abstracts

- HRDÝ I. & VEJBER J. 1952: Blattfrass der Larve des Kartoffelkäfers (*Leptinotera decemlineata* Say) und sein Verlauf. *Folia Zoologica et Entomologica* **1**: 10–15 (in Czech, with summaries in Russian and German).
- NOVÁK K., SKUHRAVÝ V., HRDÝ I. & HŮRKA K. 1953: Versuch zur Bestimmung der Einwirkung einer Bestäubung der Waldländer mit HCH auf die Biocenosis der Insekten. *Folia Zoologica et Entomologica* **2**: 34–47 (in Czech, with summaries Russian and German).
- SKUHRAVÝ V., NOVÁK K., HRDÝ I. & HŮRKA K. 1953: Pflugzeug-Bekämpfung der Imaga von *Melolontha melolontha* L. durch Bestäubung mit HCH. *Folia Zoologica et Entomologica* **2**: 111–119.

- HRDÝ I. 1954: Zur Frage der sogenannten Tracheenlungen von *Gryllus domesticus* L. *Acta Societatis Entomologicae Českosloveniae* **51**: 25–30 (in Czech, with summaries in Russian and German).
- LANDA V., NOVÁK K., SKUHRAVÝ V. & HRDÝ I. 1955: Beitrag zur Bionomie der Imaga von *Melolontha melolontha* L.). *Folia Zoologica et Entomologica* **4**: 135–144.
- SKUHRAVÝ V., NOVÁK K., HRDÝ I. & HÚRKA K. 1955: [Attempt to evaluate effects of Dynocid on insects inhabiting potato fields]. *Folia Zoologica et Entomologica* **4**: 39–50 (in Czech, with a summary in Russian).
- HRDÝ I. 1955: Influence of HCH (BHC) and DDT on the female cockchafer (*Melolontha melolontha* L.). *Acta Societatis Zoologicae Bohemoslovacae* **19**: 331–353 (in Czech, with summaries in Russian and English).
- HRDÝ I., HÚRKA K. & HRDÁ J. 1956: Quantitative determination of cockchafers' grubs in agriculture. *Proceedings of ČSZAV. Plant Protection Science* **29**: 69–82 (in Czech, with summaries in Russian and English).
- HRDÝ I. 1957: Postembryonale Entwicklung und Wachstum der Hausgrille *Gryllus domesticus*. *Acta Societatis Entomologicae Českosloveniae* **53**: 23–62 (in Czech, with summaries in Russian and German).
- HRDÝ I. 1957: Comparison of preparation and staining techniques of insect blood cells. *Acta Societatis Entomologicae Českosloveniae* **54**: 305–311.
- HRDÝ I. 1958: Karyometry and analysis of values of the nucleoplasmatic index for haemocytes of imago of *Gryllus domesticus* L. *Acta Societatis Zoologicae Bohemoslovacae* **22**: 79–93 (in Czech, with a summary in English).
- HRDÝ I. 1958: The blood picture of imago of the cricket *Gryllus domesticus* L. *Acta Societatis Entomologicae Českosloveniae* **55**: 301–315 (in Czech, with a summary in English).
- HRDÝ I. 1959: Attempt at morphological distinction of principal types of hemocytes of the cricket *Gryllus domesticus* L. *Acta Societatis Zoologicae Bohemoslovacae* **23**: 131–155 (in Czech, with a summary in English).
- HRDÝ I. 1959: Versuch um Erhöhung der Resistenz der Fasserholzplatten gegen Termitenbeschädigung. *Folia Zoologica* **8**: 193–207.
- HRDÝ I. & HRDÁ J. 1960: Effect of DDT and BHC on termites *Kaloterme flavicollis* and *Reticulitermes lucifugus*. *Folia Zoologica* **9**: 209–215.
- HRDÝ I., NOVÁK V. J. A. & ŠKROBAL D. 1960: Influence of the queen inhibitory substance of honeybee on the development of supplementary reproductives in the termite *Kaloterme flavicollis*. Pp.: 172–174. In: HRDÝ I. (ed.): *The Ontogeny of Insects. Acta Symposii de Evolutione Insectorum. Praha 1959*. Praha: Publishing House of Czechoslovak Academy of Sciences, 406 pp.
- HRDÝ I. & NOVÁK V. J. A. 1960: A contribution to the question of nonspecificity of the exohormones. Pp.: 222–223. In: PAVAN M. & EISNER T. (eds.): *Verhandlungen 11. Internationaler Kongress für Entomologie, Wien, 1960, Band 3, Symposium 3: Chemie der Insekten, Symposium 4: Chemische Verteidigungsmechanismen bei Arthropoden*. Wien, 223 pp.
- HRDÝ I. 1961: Contribution to the knowledge of European species of the genus *Reticulitermes* (Holmgren) (Isoptera: Rhinotermitidae). *Acta Faunistica Entomologica Musei Nationalis Pragae* **7**(61): 97–107.
- HRDÝ I. 1961: A quick laboratory method of determining the termite resistance of materials. *Beiträge zur Entomologie* **11**: 546–556.
- HRDÝ I. 1961: Contribution to the study of natural resistance of some timbers against termites. *Drevářský výskum* **3**: 133–148 (in Czech, with summary in Russian, German, and English).
- HRDÝ I. 1961: Zur Frage der natürlichen Dauerhaftigkeit einiger Hölzer aus China gegen Termiten. *Beiträge zur Entomologie* **11**: 557–565.
- WEISER J. & HRDÝ I. 1962: Pyemotes – Mites as parasites of termites. *Zeitschrift für Angewandte Entomologie* **51**: 94–97.
- HRDÝ I. & SLÁMA K. 1963: The influence of allatectomy on the oviposition of queen bees. Pp.: 307–309. In: Le ministre de l'agriculture, silviculture (ed.): *Abstracts of the XLIXth International Beekeeping Congress, Prague*. Prague: Apimondia, 426 pp.
- HRDÝ I. 1963: Resistance of wood-fibre plates impregnated against termites in laboratory and field tests. *Folia Zoologica* **12**: 75–85.
- HRDÝ I. & HÚRKOVÁ J. 1964: Toxicity of DDT to worker honey bees. *Acta Societatis Zoologicae Bohemoslovacae* **27**: 43–45.
- HRDÝ I. & HÚRKOVÁ J. 1969: Vorläufige Mitteilung zum Problem der DDT-Resistenz bei Populationen von *Leptinotarsa decemlineata* Say aus der Tschechoslowakei. *Berichte der 10. Wanderversammlung Deutscher Entomologen, Tagungsbericht* **80**: 317–320 [1965].
- HRDÝ I. 1965: Beitrag zur Bionomie von *Coptotermes formosanus*, Laboratoriumszucht und Verwendbarkeit dieser Art für die Prüfung der Termitenfestigkeit von Material. *Beihefte zu Material und Organismen, Holz und Organismen* **1**: 427–436.
- HRDÝ I. & ZELENÝ J. 1967: Preference for wood of different degrees of dampness in some termites from Cuba (Isoptera). *Acta Entomologica Bohemoslovaca* **64**: 352–363.
- HRDÝ I. 1967: Testing of termite resistance of woods. *B.W.P.A. Convention Cambridge 1967*: 1–6.
- HRDÝ I., ZELENÝ J. & NOVÁK K. 1967: Comparacion de la efectividad de los insecticidas endrin y trichlorfon en alimento artificial para el control de la larva de *Diatraea saccharalis* (Fabricius). *Poyeana (A)* **36**: 1–10.
- HRDÝ I. & ZELENÝ J. 1968: Hop aphid (*Phorodon humuli*) resistant to thiometon. *Acta Entomologica Bohemoslovaca* **65**: 183–187.

- HRDÝ I., HŮRKOVÁ J. & ZELENÝ J. 1968 (1971): Insecticide resistance of agricultural pests in Czechoslovakia. Pp.: 236–238. In: TRJAPICYN V. A. (ed.): *Proceedings of the 13th International Congress of Entomology, Moscow. Volume 2*. Leningrad: Nauka, 422 pp.
- HRDÝ I. & KŘEČEK J. 1968 (1972): Bionomical-ecological classification of termites, pests of wood and materials. Contribution to the ecology of the termites of Cuba. Pp.: 38–40. In: TRJAPICYN V. A. (ed.): *Proceedings of the 13th International Congress of Entomology, Moscow. Volume 3*. Leningrad: Nauka, 493 pp.
- HRDÝ I., JASÍČ J., NOVÁK K., RŮŽIČKA Z., VALLO V., WEISMANN L. & ZELENÝ J. 1969: The sugar cane borer, *Diatraea saccharalis* (Lep., Pyralidae) in Cuba. II. Natural limitation, biological control and contribution to the methods of population density estimation. *Acta Entomologica Bohemoslovaca* **66**: 255–265.
- HRDÝ I., BOUČKOVÁ J. & HRDÁ J. 1969: The effect of Teration and Terra Sytam on the susceptible and resistant population of hop aphid. *Plant Protection Science (Ochrana Rostlin)* **5**: 231–236 (in Czech, with a summary in Russian).
- HRDÝ I., KŘEČEK J. & VRKOČ J. 1969: Interesting response of termites to some toxicants. Pp.: 65–67. In: ANONYMOUS (ed.): *Proceedings of the VIth Congress of International Union for the Study of Social Insects, Bern, Switzerland, 15–20 September 1969*. Bern: IUSSI, 190 pp.
- HRDÝ I. & ZELENÝ J. 1969: Preferencia de algunos termites de Cuba por los arboles de pino y limonero con diferentes grados de humedad. *Poyeana (A)* **65**: 1–39.
- HRDÝ I. 1970: Laboratory colonies of *Microceroterme cameroni* Snyder (Isoptera). *Journal of Indian Academy of Wood Science* **1**: 11–18.
- HRDÝ I., ZELENÝ J., HRDÁ J. & BOUČKOVÁ-KONIČKOVÁ J. 1970: Stability of resistance to thiometon, multiple – resistance and population density of the hop aphid, *Phorodon humuli* (Schrank), during 1967–68 (Homoptera, Aphididae). *Acta Entomologica Bohemoslovaca* **67**: 143–174.
- HRDÝ I. 1970: Insecticide resistance of the hop aphid, *Phorodon humuli* (Schrank) in Czechoslovakia. Pp.: 812–814. In: ANONYMOUS (ed.): *7th International Congress of Plant Protection, Paris*. Paris, 866 pp.
- ZELENÝ J. & HRDÝ I. 1970: [Population dynamics of the hop aphid on untreated and chemically treated hop plants]. Pp.: 27–33. In: ANONYMOUS (ed.): *[Proceedings of the 3rd Plant Protection Conference, Praha, 24–25 February. Part 2]*. Praha: ČSAZV, Ústav ochrany rostlin & MZVŽ, 281 pp (in Czech).
- HŮRKOVÁ J. & HRDÝ I. 1971: DDT-resistance in the blossom beetle (*Meligetes aeneus*). *Plant Protection Science (Ochrana Rostlin)* **7**: 127–130 (in Czech).
- HRDÝ I. & KŘEČEK J. 1972: Development of superfluous soldiers induced by the juvenile hormone analogues in the termite *Reticulitermes lucifugus santonensis*. *Insectes Sociaux* **19**: 105–109.
- HRDÝ I. 1972: Der Einfluss von zwei Juvenilhormonanalogen auf die Differenzierung der Soldaten bei *Reticulitermes lucifugus santonensis* Feyt. (Isopt.: Rhinotermitidae). *Zeitschrift für Angewandte Entomologie* **72**: 129–134.
- VRKOČ J., UBIK K., DOLEJŠ L. & HRDÝ I. 1973: On the chemical composition of frontal gland secretion in termites of the genus *Nasutitermes* (*N. costalis* and *N. rippertii*; Isoptera). *Acta Entomologica Bohemoslovaca* **70**: 74–80.
- HRDÝ I. & ZELENÝ J. 1973: Effect of juvenoids on the population density of *Phorodon humuli* in a cage experiment (Homoptera, Aphididae). *Acta Entomologica Bohemoslovaca* **70**: 386–389.
- HRDÝ I. 1974: Effects of juvenoids on insecticide susceptible and resistant aphids (*Myzus persicae*, *Aphis fabae* and *Therioaphis maculata*; Homoptera, Aphididae). *Acta Entomologica Bohemoslovaca* **71**: 367–381.
- HRDÝ I., ZELENÝ J., HŮRKOVÁ J., MATOLÍN S. & WEYDA F. 1974: Juvenoids and some derived compounds as potential aphicides and miticides. Pp.: 97–107. In: *Proceedings of Plant Protection Congress V, Moscow*.
- HRDÝ I. 1975: Insecticide resistance in aphids. Pp.: 737–749. In: ANONYMOUS (ed.): *Proceedings of the 8th British Insecticide and Fungicide Conference, Brighton*. Nottingham, UK: British Crop Protection Council, 720–1069 pp.
- HRDÝ I., NOVÁK K. & KNEIFL V. 1975: Pheromone traps against the codling moth, first experience from Czechoslovakia. *Agrochémia* **15**: 309–312 (in Czech).
- HRDÝ I. & ŠKROBAL D. 1976: Wirkung von zwei Juvenoiden auf Bienenvölker (*Aphis mellifera* L.). *Apidologie* **7**: 39–47.
- HRDÝ I. 1976: Integrated control of pest and diseases in hops. *IOBC/WPRS Bulletin* **2**: 66–81.
- HRDÝ I. & KRAMPL F. 1977: Faunistic records from Czechoslovakia. Lepidoptera: *Cydia molesta*. *Acta Entomologica Bohemoslovaca* **74**: 286.
- HRDÝ I., PINTEROVÁ J., ŽDÁREK J. & KŘEČEK J. 1978: The influence of methoprene on pharaoh's ant (*Monomorium pharaonis*) colonies. *Acta Entomologica Bohemoslovaca* **75**: 155–163.
- VRKOČ J., KŘEČEK J. & HRDÝ I. 1978: Monoterpenic alarm pheromones in two *Nasutitermes* species. *Acta Entomologica Bohemoslovaca* **75**: 1–8.
- HRDÝ I., KRAMPL F., KULDOVÁ J., MAREK J. & ŠIMKO K. 1979: Mapping of the Oriental fruit moth (*Cydia molesta*) by means of pheromone traps. *Plant Protection Science (Ochrana Rostlin)* **15**: 257–267 (in Czech, with a summary in English).
- HRDÝ I., MAREK J. & KRAMPL F. 1979: Sexual pheromone activity of 8-dodecenyl and 11-tetradecenyl acetates for males of several lepidopteran species in field trials. *Acta Entomologica Bohemoslovaca* **76**: 65–84.

- HRDÝ I., KŘEČEK J. & ZUZKOVÁ Z. 1979: Juvenile hormone analogues: Effects on the soldier caste differentiation in termites (Isoptera). *Acta Societatis Zoologicae Bohemoslovacae* **43**: 260–269.
- HRDÝ I. 1979: Integrierter Pflanzenschutz im Hopfenbau. Pp.: 267–280. In: RUSS K. & BERGER H. (eds.): *Proceedings of International Symposium. IOBC/WPRS Integrated Control in Agriculture and Forestry*, Wien. Wien: OILB/SROP-IOBC/WPRS, 648 pp.
- HRDÝ I. & ŠEDIVÝ J. 1979: Males of *Exetastes cinctipes* (Hymenoptera, Ichneumonidae) attracted to 8-dodecenyl and 11-tetradecenyl acetates. *Acta Entomologica Bohemoslovaca* **76**: 59–61.
- HRDÝ I. 1980: Pheromones in integrated pest management in orchards. Pp.: 29–38. In: HRDÝ I. & HRDLÍČKOVÁ H. (eds.): *Integrated Protection in Fruit Orchards. Proceedings of the Symposium in Vodňany*, 1979. Praha: Institute of Entomology, 125 pp. (in Czech).
- HRDÝ I., REINHARTOVÁ J. & HRDÁ J. 1980: Pheromone traps for monitoring and supervised control of the codling moth. Integrated protection in fruit orchards. Pp.: 73–85. In: HRDÝ I. & HRDLÍČKOVÁ H. (eds.): *Integrated Protection in Fruit Orchards. Proceedings of the Symposium in Vodňany*, 1979. Praha: Institute of Entomology, 125 pp. (in Czech).
- HRDÝ I., KRAMPL F. & KULDOVÁ J. 1980: Oriental fruit moth – important pest of peach trees in Czechoslovakia. Pp.: 93–100. In: HRDÝ I. & HRDLÍČKOVÁ H. (eds.): *Integrated Protection in Fruit Orchards. Proceedings of the Symposium in Vodňany*, 1979. Praha: Institute of Entomology, 125 pp. (in Czech).
- HRDÝ I. 1980: Insecticide resistance in aphids. Pp.: 228–231. In: KOMMENDAHL T. (ed.): *Proceeding of the Symposium of the IX International Congress of Plant Protection, 1979. Volume 1. Symposium New Pest Biotypes*. Washington, D.C.: Entomological Society of America, 630 pp.
- HORÁK A., HRDÝ I., KRAMPL F. & KALVODA L. 1980: Field trials of pheromone traps for monitoring the pea moth (*Cydia nigricana*). *Sborník ÚVTIZ – Ochrana Rostlin* **16**: 213–225 (in Czech).
- HRDÝ I. & KRÍŽ J. 1981: Insecticide-resistance spectrum in Czechoslovak populations of the hop aphid, *Phorodon humuli*. *IOBC/WPRS Bulletin* **4**(3): 29–39.
- HRDÝ I. & KULDOVÁ J. 1981: A standardized spray-residue method for measuring and a dip-test for monitoring resistance in aphids. *IOBC/WPRS Bulletin* **4**(3): 21–28.
- HRDÝ I. 1981: Integrated pest management and the possibilities to cope with insecticide resistance in the hop aphid and the two-spotted spider mite in hops. *IOBC/WPRS Bulletin* **4**(3): 78–86.
- ŠULA J., KULDOVÁ J. & HRDÝ I. 1981: Insecticide-resistance spectrum in the hop aphid (*Phorodon humuli*) populations from different regions: Notes on resistance mechanisms. *IOBC/WPRS Bulletin* **4**(3): 46–54.
- ZELENÝ J., HRDÝ I. & KALUSHKOV P. K. 1981: Population dynamics of aphid and mite predators in hops: Bohemian hop-growing area. *OILB/WPRS Bulletin* **4**(3): 87–96.
- HRDÝ I. 1981: The potential of juvenoids in social insect regulation: Termites. Pp.: 761–767. In: KLOZA M. (ed.): *International Conference of Regulation of Insect Development and Behaviour. Part 2*. Wrocław: Technical University Wrocław, 1146 pp.
- KŘEČEK J., HRDÝ I., JAROLÍM V. & WIMMER Z. 1981: Antagonistic interaction between a juvenile hormone analogue and precocene I in *Prorehinotermes simplex* (Isoptera). *Acta Entomologica Bohemoslovaca* **78**: 266–269.
- HRDÝ I. & KRAMPL F. 1982: Faunistic records from Czechoslovakia, Lepidoptera, Tortricidae: *Cydia medicaginis* (Kuzněcov, 1962), *Cydia gallicana* (Guenée, 1845). *Acta Entomologica Bohemoslovaca* **79**: 238.
- GELBIČ I., HRDÝ I. & SPITZER K. 1982: Noctuid moths (Lepidoptera) recorded by pheromone traps in Cuba. *Acta Entomologica Bohemoslovaca* **79**: 393–395.
- HRDÝ I. 1982: Use of pheromones as a part of integrated pest control projects in Czechoslovakia. P.: 1081. In: BÜNEMANN G. (ed.): *Abstract Volume of the 21st International Horticultural Congress, Hamburg*. Hamburg: International Society for Horticultural Science, 2195 pp.
- RUPEŠ V., CHMELA J., HRDÝ I. & KŘEČEK J. 1983: Effectiveness of methoprene-impregnated baits in the control of *Monomorium pharaonis* ant populations infesting health establishment and household. *Journal of Hygiene, Epidemiology, Microbiology and Immunology* **27**: 295–303.
- ŠIFNER F., ŽDÁREK J., HRDÝ I., & KALVODA L. 1983: Pheromone traps for the pest management of phycitid moths. *Crop Protection* **2**: 463–472.
- ŽDÁREK J. & HRDÝ I. 1984: [Prospects for the application of ethological principles in the insect pest management]. Pp.: 41–44. In: NOVÁK I., HAVLÍČKOVÁ H. & HONĚK A. (eds.): [*Proceedings of the IXth Czechoslovak Plant Protection Conference, Brno, 1983*]. Praha: VÚRV, 343 pp (in Czech).
- HRDÝ I., KULDOVÁ J. & KRAMPL F. 1984: [A new pest of alfalfa in Czechoslovakia: *Cydia medicaginis* (Lepidoptera, Tortricidae)]. Pp.: 161–162. In: NOVÁK I., HAVLÍČKOVÁ H. & HONĚK A. (eds.): [*Proceedings of the IXth Czechoslovak Plant Protection Conference Brno 1983*]. Praha: VÚRV, 343 pp (in Czech).
- HRDÝ I. & MAREK J. 1984: [Pheromone traps for monitoring tortricid moths in vineyards]. Pp.: 167–168. In: NOVÁK I., HAVLÍČKOVÁ H. & HONĚK A. (eds.): [*Proceedings of the IXth Czechoslovak Plant Protection Conference Brno 1983*]. Praha: VÚRV, 343 pp (in Czech).
- HORÁK A. & HRDÝ I. 1984: CN-Etokap: The pheromone trap for monitoring the pea moth, *Cydia nigricana*. Pp.: 171–172. In: NOVÁK I., HAVLÍČKOVÁ H. & HONĚK A. (eds.): In: NOVÁK I., HAVLÍČKOVÁ H. & HONĚK A. (eds.): [*Proceedings of the IXth Czechoslovak Plant Protection Conference Brno 1983*]. Praha: VÚRV, 343 pp (in Czech).

- REINHARTOVÁ J. & HRDÝ I. 1984: [Forecasting codling moth flight based on pheromone trap catches and physiological time models]. Pp.: 177–178. In: NOVÁK I., HAVLÍČKOVÁ H. & HONĚK A. (eds.): [*Proceedings of the IXth Czechoslovak Plant Protection Conference Brno 1983*]. Praha: VÚRV, 343 pp (in Czech).
- HRDÝ I. 1984: Stability of resistance to insecticides and the spreading of hop aphid R-biotypes in Czechoslovakia. *IOBC/WPRS Bulletin* 7(6): 2–10.
- HRDÝ I. 1985: The role of juvenile hormones and juvenoids in soldier formation in Rhinotermitidae. Pp.: 245–249. In: WATSON J. A. L., OKOT-KOTBER B. M. & NOIROT CH. (eds.): *Caste Differentiation in Social Insects*. Oxford & New York: Pergamon Press, 405 pp.
- ŠTYS P. & HRDÝ I. 1985: A new introduced pest of plane-trees – *Corythucha ciliata*. *Ochrana Rostlin* 21: 112.
- HRDÝ I. 1986: [Some difficulties of the present plant protection and the strategy of integrated production in agriculture]. Pp.: 18–21. In: HRDÝ I. & HRDLÍČKOVÁ H. (eds.): [*Integrated Fruit Production. Symposium, České Budějovice 1984*]. České Budějovice: Institute of Entomology, 183 pp (in Czech).
- REINHARTOVÁ J. & HRDÝ I. 1986: [The codling moth – analysis of flight activity as dependent on weather conditions]. Pp.: 142–148. In: HRDÝ I. & HRDLÍČKOVÁ H. (eds.): [*Integrated Fruit Production. Symposium, České Budějovice 1984*]. České Budějovice: Institute of Entomology, 183 pp (in Czech).
- HRDÝ I., KREMHELLER H. TH., KULDOVÁ J., LÜDERS W. & ŠULA J. 1986: Insektizidresistenz der Hopfenblattlaus, *Phorodon humuli*, in böhmischen, bayerischen und baden-württembergischen Hopfenanbaugebieten. *Acta Entomologica Bohemoslovaca* 83: 1–9.
- HRDÝ I., HUBAISHAN M. A., MAREK J., POSPĚCH L., POVOLNÝ D., VALLO V. & ŽDÁREK J. 1986: First experience with the monitoring of the European corn borer, *Ostrinia nubilalis*, with pheromone traps in Czechoslovakia. *Plant Protection Science (Ochrana Rostlin)* 22: 129–140 (in Czech, with summaries in Russian, English, and German).
- HRDÝ I., KONEČNÝ K. & VRKOČ J. 1986: The effects of formulation on the effectiveness of codlemone in the monitoring of the codling moth, *Cydia pomonella*. *IOIBC/WPRS Bulletin* 9(4): 162–165.
- HRDÝ I., KALVODA L., OBLOŽINSKÝ A., ROMAŇUK M., VRKOČ J. & ŽDÁREK J. 1986: [A set of synthetic pheromones for monitoring agricultural insect pests]. Pp.: 117–118. In: VEVERKA K., OLIBERUS J. & MIKULKA J. (eds.): [*Proceedings of the 10th Czechoslovak Plant Protection Conference, Brno, 1986*]. Praha: VÚRV, 406 pp (in Czech).
- HRDÝ I., MAREK J., KRAML F. & ŽDÁREK J. 1986: [The wheat moth *Cnephasia pumicana*: A new potential pest of grain in Czechoslovakia]. Pp.: 127–128. In: VEVERKA K., OLIBERUS J. & MIKULKA J. (eds.): [*Proceedings of the 10th Czechoslovak Conference of Plant Protection, Brno, 1986*]. Praha: VÚRV, 406 pp (in Czech).
- METWALLY M. M. & HRDÝ I. 1987: Monitoring of *Ephestia cautella* (Lepidoptera, Pyralidae) by means of pheromone traps in Lower Egypt. *Acta Entomologica Bohemoslovaca* 84: 408–413.
- HRDÝ I., KRAML F. & MAREK J. 1987: Faunistic records from Czechoslovakia: Lepidoptera, Tortricidae, *Cnephasia pumicana*. *Acta Entomologica Bohemoslovaca* 84: 66.
- HORÁK A. A. & HRDÝ I. 1988: Attractiveness of (E)-10-dodecen-1-yl acetate for the pea moth, *Cydia nigricana*: modification by codlemone, codlemone acetate and dodecyl acetate. *Acta Entomologica Bohemoslovaca* 85: 174–181.
- VRKOČ J., KONEČNÝ K., VALTEROVÁ I. & HRDÝ I. 1988: Isomerization of conjugated dienes in pheromone dispensers and its influence on efficacy of pheromone traps for some tortricide moths. Pp.: 763–766. In: SEHNAL F., ZABZA A. & DELINGER D. L. (eds.): *Endocrinological Frontiers in Physiological Insect*. Wrocław: Technical University Wrocław, 1077 pp.
- RYBA J., RUPEŠ V., PINTEROVÁ J., VRBA Z., POKORNÝ M., JAROLÍM V., HRDÝ I. & KRČEK J. 1988: Efficacy of methoprene-impregnated baits on laboratory colonies of Pharaoh's ant, *Monomorium pharaonis*. *Acta Entomologica Bohemoslovaca* 85: 340–347.
- VRKOČ J., KONEČNÝ K., VALTEROVÁ I. & HRDÝ I. 1988: Rubber substrates and their influence on isomerization of conjugated dienes in pheromone dispensers. *Journal of Chemical Entomology and Ecology* 14: 1347–1358.
- RUPEŠ V., VRBA Z., TOMÁŠEK L., RYBA J., HRDÝ I., RABAS V., POKORNÝ M., BENEŠOVÁ J., BRESTOVSKÝ J., CHMELA J., ČUMPELÍK J., KRČEK J., KUKLÍKOVÁ R., KOBÍČ V., KREJČÍKOVÁ Z., LEDVINKA J., MASLENOVÁ D., MAZÁK J., MORIC Z., PLICHRA J., TEPLAN J., TONDL F. & VELEBILOVÁ E. 1988: The efficacy of two variants of bait with juvenoid methoprene (Lafarex N and Lafarex N'86) on the pharaoh's ant, *Monomorium pharaonis*, in domestic locations. *Acta Entomologica Bohemoslovaca* 85: 418–427.
- HOCHMUT R., HRDÝ I., KOLK K., LIŠKA J., RODZIEWICZ A., VRKOČ J. & ŽDÁREK J. 1989: Standardized pheromone traps and dispensers for monitoring the nun moth. *Forestry (Lesnictví)* 35: 535–548.
- HORÁK A., HRDÝ I., KONEČNÝ K. & VRKOČ J. 1989: Effect of substrate formulation on the efficacy of the pea moth, *Cydia nigricana*, sex pheromone lures. *Entomologia Experimentalis et Applicata* 53: 125–131.
- HRDÝ I. 1989: Applicazione dei feromoni degli insetti. Pp.: 149–160. In: DESEÖ K. V. (ed.): *Applicazioni alternative della difesa delle piante – Proceedings. Col. Alternative Systems in Plant Protection, Agri Cesena, Italy*. Cesena: Comune di Cesena, 177 pp.
- HRDÝ I., LIŠKA J., VRKOČ J. & HOCHMUT R. 1989: New records on sex attractants for males and faunistic comments on moths (Lepidoptera) from Czechoslovakia. *Acta Entomologica Bohemoslovaca* 86: 252–268.
- HORÁK A., STREINZ L., HRDÝ I. & VRKOČ J. 1990: Field trials with propheromones as sex attractants for male pea moths, *Cydia nigricana*. Pp.: 227. In: FREHSE H., KESSELER-SCHMITZ E. & CONWAY S. (ed.): *Book of Abstracts of 7th International Congress of Pesticide Chemistry*. Hamburg: IUPAC, 444 pp.

- HRDÝ I., KULDOVÁ J., SUNDUKOVA N. F. & VRKOČ J. 1990: [Small plot trials of pheromone dispensers for male confusion of the oriental fruit moth and plum fruit moth]. *Plant Protection Science (Ochrana Rostlin)* **26**: 223–233 (in Czech).
- KULDOVÁ J., WIMMER Z., HRDÝ I., ROMAŇUK M. & SEHNAL F. 1990: Biological activities of juvenoids derived from 2-(4-hydroxybenzyl)-1-cyclohexanone. *Acta Entomologica Bohemoslovaca* **87**: 332–335.
- NOVOTNÝ J., PATOČKA J., HRDÝ I. & VRKOČ J. 1990: Zur Überwachung des grünen Eichenwicklers, *Tortrix viridana* L. (Lep., Tortricidae) mittels synthetischen Sexualpheromone. *Anzeiger für Schädlingskunde, Pflanzenschutz, Umweltschutz* **63**: 125–129.
- HRDÝ I., BOREK V., KALINOVÁ B., KULDOVÁ J. AND VRKOČ J. 1991: Male confusion of the oriental fruit moth, *Cydia molesta* and plum fruit moth, *Cydia funebrana*: Small plot trials of pheromone dispensers. Pp.: 401–406. In: HRDÝ I. (eds.): *Proceedings of Conference on Insect Chemical Ecology, Tábor, 1990*. The Hague & Prague: Academia & SPB Academia, 513 pp.
- WIMMER Z., ROMAŇUK M., SLÁMA K., KULDOVÁ J., HRDÝ I. & SEHNAL F. 1991: JH activity of selected insect juvenile hormone analogs: Some structure activity observations. Pp.: 453–456. In: HRDÝ I. (ed.): *Proceedings of Conference on Insect Chemical Ecology, Tábor, 1990*. The Hague & Prague: Academia & SPB Academia, 513 pp.
- KULDOVÁ J., WIMMER Z. & HRDÝ I. 1991: Biological activity of juvenoids derived from 2-(4-hydroxybenzyl)-1-cyclohexanone on aphids. Pp.: 461–466. In: HRDÝ I. (ed.): *Proceedings of Conference on Insect Chemical Ecology, Tábor, 1990*. The Hague & Prague: Academia & SPB Academia, 513 pp.
- STREINZ L., VRKOČ J., HORÁK A. & HRDÝ I. 1991: Syntheses of and prospects for utilization of some new propheromones. Pp.: 485–488. In: HRDÝ I. (ed.): *Proceedings of Conference on Insect Chemical Ecology, Tábor, 1990*. The Hague & Prague: Academia & SPB Academia, 513 pp.
- HRDÝ I. 1991: Biorational Insecticides: Juvenoids, Synthetic Pheromones and their role in integrated pest management. Pp.: 383–386. In: KOCOUREK F. & RÝVOVÁ A. (eds.): *Proceedings of the XIIIth Czechoslovak Plant Protection Conference, Praha*. Praha: VÚRV, 480 pp (in Czech, with a summary in English).
- BERÁNKOVÁ J., KOCOUREK F. & HRDÝ I. 1991: Monitoring of the phenology of the plum fruit moth *Cydia funebrana* (Treitschke) and the peach twig borer *Anarsia lineatella* Zeller. Pp.: 315–316. In: KOCOUREK F. & RÝVOVÁ A. (eds.): *Proceedings of the XIIIth Czechoslovak Plant Protection Conference, Praha*. Praha: VÚRV, 480 pp (in Czech, with a summary in English).
- HRDÝ I., HRDÁ J., HOCHMUT R., LIŠKA J. & VRKOČ J. 1992: [Standardized pheromone dispensers and traps for monitoring the moth *Rhyacionia buoliana*]. *Lesnictví – Forestry* **38**: 839–852 (in Czech).
- HRDÝ I., MAREK J., KRAMP L., KULDOVÁ J. & BARABÁS L. 1993: Distribution of the fruit tree pests *Cydia molesta*, *Cydia funebrana* and *Anarsia lineatella* (Lepidoptera: Tortricidae, Gelechiidae) in former Czechoslovakia as recorded by pheromone traps. *Acta Societatis Zoologicae Bohemicae* **58**: 53–60.
- STREINZ L., HORÁK A., VRKOČ J. & HRDÝ I. 1993: Propheromones derived from codlemone. *Journal of Chemical Ecology* **91**: 1–9.
- KULDOVÁ J., HRDÝ I. & WIMMER Z. 1994: Selection of compounds acting as aphid development and reproduction regulators: Laboratory screening. *Pesticide Science* **41**: 319–325.
- KULDOVÁ J., HRDÝ I. & ŘIČÁNKOVÁ M. 1995: [Efficacy of the juvenoid W-328 against the oriental fruit moth and the grapevine moth in field experiments]. Pp.: 264–265. In: CHODOVÁ D., MARTINKOVÁ Z., MIKULKA J. & OLBERIUS J. (eds.): *[Proceedings of the XIIIth Czechoslovak Plant Protection Conference, Praha]*. Praha-Ruzyně: VÚRV, 378 pp (in Czech).
- KOCOUREK F., BERÁNKOVÁ J. & HRDÝ I. 1995: A temperature-driven model to simulate the population development of the plum fruit moth, *Cydia funebrana* (Treit.). *Anzeiger für Schädlingskunde, Pflanzenschutz, Umweltschutz* **68**: 64–68.
- HRDÝ I. & SVATOŠ A. 1995: Thirty six years of termite research in Prague. Pp.: 88–94. In: DANIEL M. (ed.): *Proceedings of the Eco-Conference on Africa, Prague*. Praha: AV ČR, 217 pp (in Czech, with a summary in English).
- WIMMER Z., REJZEK M., ZAREVÚČKA M., KULDOVÁ J., HRDÝ I., NĚMEC V. & ROMAŇUK M. 1997: A series of dicyclic insect juvenile hormone analogs of the Czech origin: Twenty years of development. *Journal of Chemical Ecology* **23**: 605–628.
- KOCOUREK F., BERÁNKOVÁ J. & HRDÝ I. 1996: Flight patterns of the peach twig borer, *Anarsia lineatella* Zell. (Lep., Gelechiidae) in Central Europe as observed using pheromone traps. *Journal of Pest Science* **69**: 84–87.
- HRDÝ I., KOCOUREK F., BERÁNKOVÁ J. & KULDOVÁ J. 1996: Temperature models for predicting the flight activity of local populations of *Cydia funebrana* (Lepidoptera: Tortricidae) in Central Europe. *European Journal Entomology* **93**: 569–578.
- HRDÝ I., KULDOVÁ J., KOCOUREK F., BERÁNKOVÁ J. & PULTAR O. 1996: The potential of pheromones in combination with juvenoids or entomopathogens in IPM of the codling moth, *Cydia pomonella*. *IOBC/WPRS Bulletin* **19**(4): 334–335.
- HRDÝ I., KULDOVÁ J., KOCOUREK F., BERÁNKOVÁ J. & PULTAR O. 1996: Insect viruses and juvenoids disseminated by means of pheromone traps: A potential tool of Integrated Pest Management in orchards. P.: 718. In: ANONYMOUS (ed.): *Proceedings of the XX. International Congress of Entomology, Firenze, Italy, 25–30 August 1996*. Firenze: Tipografia TAF, 820 pp.
- KULDOVÁ J., ŘIČÁNKOVÁ M. & HRDÝ I. 1996: Efficacy of selected juvenoids on egg hatchability of the oriental fruit moth, *Cydia molesta*, and grapevine moth, *Lobesia botrana*, in laboratory and field experiments. *Plant Protection Science (Ochrana rostlin)* **32**: 19–25.
- HRDÝ I., KRAMP L., KULDOVÁ J. & KALINOVÁ B. 1997: Occurrence of potential orchard pests *Cydia lobarzewskii* and *C. janthinana* (Lepidoptera: Tortricidae) in the Czech Republic with notes on some other species according to pheromone trapping. *Klapalekiana* **33**: 155–172 (in Czech, with a summary in English).

- WIMMER Z., REJZEK M., ZAREVÚCKA M., KULDOVÁ J., HRDÝ I., NĚMEC V. & ROMAŇUK M. 1997: A series of dicyclic insect juvenile hormone analogs of the Czech origin: Twenty years of development. *Journal of Chemical Ecology* **23**: 605–628.
- KULDOVÁ J., HRDÝ I. & SVATOŠ A. 1997: Defense secretion of Prothinotermes simplex: Toxicity to susceptible and insecticide resistant *Musca domestica*. P.: 57. In: CRAILSHIM K. & STABENTHEINER A. (eds.): *Abstracts of the International Union for the Study of Social Insects, Graz, Austria*. Graz: University of Graz, 112 pp.
- KULDOVÁ J., HRDÝ I. & WIMMER Z. 1998: Response of the hop aphid, *Phorodon humuli* (Homoptera: Aphididae), to the application of juvenile hormone analogue in field trials. *Crop Protection* **17**: 213–218.
- HRDÝ I., KULDOVÁ J., SVATOŠ A., WEYDA F. & WIMMER Z. 1998: Termites as a model of wood destroying social insects: Caste regulation and chemical ecology. Pp.: 248–249. In: BRUNNHOFER V. & SOLDÁN T. (eds.): *Book of Abstracts. Vth European Congress of Entomology, August 23–29, 1998, České Budějovice, Czech Republic. Volume 1*. České Budějovice: Institute of Entomology, 423 pp.
- PULTAR O., HRDÝ I., KULDOVÁ J., KOCOUREK F., BERÁNKOVÁ J. & STARÁ J. 1998: *Cydia pomonella* granulosus virus disseminated by means of pheromone stations: A potential tool of the codling moth management. Pp.: 638–639. In: BRUNNHOFER V. & SOLDÁN T. (eds.): *Book of Abstracts. Vth European Congress of Entomology, August 23–29, 1998, České Budějovice, Czech Republic. Volume 2*. České Budějovice: Institute of Entomology, 320 pp.
- ŠOBOTNÍK J., WEYDA F. & HRDÝ I. 1999: Morphology and anatomy of presoldier of *Prothinotermes simplex* (Isoptera: Rhinotermitidae). Pp.: 309–314. In: TAJOVSKÝ K. & PIŽL V. (eds.): *Soil Zoology in Central Europe. Proceedings of the 5th Central European Workshop on Soil Zoology, České Budějovice, 1999*. České Budějovice: Institute of Entomology, 377 pp.
- SVATOŠ A., KALINOVÁ B., HOSKOVEC M., KINDL J. & HRDÝ I. 1999: Chemical communication in horse-chestnut leafminer *Cameraria ohridella* Deschka & Dimić. *Plant Protection Science* **35**: 10–13.
- SVATOŠ A., KALINOVÁ B., HOSKOVEC M., KINDL J., HOVORKA O. & HRDÝ I. 1999: Identification of a new lepidopteran sex pheromone in picogram quantities using an antennal biodeceptor: (8E,10Z)-Tetradeca-8,10-dienal from *Cameraria ohridella*. *Tetrahedron Letters* **40**: 7011–7014.
- KULDOVÁ J., HRDÝ I. & SVATOŠ A. 1999: Defense secretion of *Prothinotermes simplex*: Toxicity to insecticide susceptible and resistant house fly. *Journal of Chemical Ecology* **25**: 657–662.
- MAREK J., KRAML P. & HRDÝ I. 2000: (E,Z)-7,9-Dodecadien-1-yl acetate acts as attractant for males of the genus *Idea* (Lepidoptera: Geometridae: Sterrhinae). *Plant Protection Science* **30**: 95–100.
- WIMMER Z., KULDOVÁ J., HRDÝ I., BENNETTOVA B. & WIMMEROVA M. 2000: Juvenogens – insect hormonogenic compounds. P.: 1016. In: GAZZONI D. L. (ed.): *Abstract Book I. XXI International Congress of Entomology, Iguacu Falls, Brazil, 20–26 August 2000*. Londrina, PR: Societas Entomologica, 590 pp.
- PULTAR O., KOCOUREK F., STARÁ J., KULDOVÁ J. & HRDÝ I. 2000: Control of the codling moth with CpGV disseminated by means of pheromone stations: 5 years of field trials. P.: 511. In: GAZZONI D. L. (ed.): *Abstract Book I. XXI International Congress of Entomology, Iguacu Falls, Brazil, 20–26 August 2000*. Londrina, PR: Societas Entomologica, 590 pp.
- HRDÝ I., KULDOVÁ J., WIMMER Z., LENZ M. & GLEESON P.V. 2000: Potential of juvenoids in bait technology for the management of subterranean termites (Isoptera) – laboratory and field studies with a carbamate derivative (W-328). P.: 648. In: GAZZONI D. L. (ed.): *Abstract Book I. XXI International Congress of Entomology, Iguacu Falls, Brazil, 20–26 August 2000*. Londrina, PR: Societas Entomologica, 590 pp.
- HRDÝ I., KULDOVÁ J. & WIMMER Z. 2001: A juvenile hormone analogue with potential for termite control: laboratory tests with *Reticulitermes santonensis*, *Reticulitermes flaviceps* and *Coptotermes formosanus* (Isopt., Rhinotermitidae). *Journal of Applied Entomology* **125**: 403–413.
- SVATOŠ A., KALINOVÁ B., HOSKOVEC M., KINDL J., HOVORKA O. & HRDÝ I. 2001: Identification of *Cameraria ohridella* sex pheromone and its possible use in horse chestnut protection. *IOBC/WPRS Bulletin* **24**(2): 5–10.
- WIMMER Z., ŠAMAN D., KULDOVÁ J., HRDÝ I. & BENNETTOVA B. 2002: Fatty acid esters of juvenoid alcohols as insect hormonogen agents (juvenogens). *Bioorganic & Medicinal Chemistry* **10**: 1305–1312.
- WEYDA F. & HRDÝ I. 2002: Imaging of horse chestnut leafminer, *Cameraria ohridella* (Lepidoptera, Gracillariidae, Lithocolletinae) larvae in leaves using digitising techniques at visible and near-infrared light. *Antenna* **26**: 249–252.
- KALINOVÁ B., SVATOŠ A., KINDL J., HOVORKA O., HRDÝ I., KULDOVÁ J. & HOSKOVEC M. 2003: Sex pheromone of horse-chestnut leafminer *Cameraria ohridella* and its use in a pheromone-based monitoring system. *Journal of Chemical Ecology* **29**: 387–404.
- WIMMER Z., SOCHŮRKOVÁ P., SILE L., ŠAMAN D., KULDOVÁ J. & HRDÝ I. 2003: Alkyl glycosides with biological activity. *Chemické Listy* **97**: 312–313.
- KULDOVÁ J., STREINZ L. & HRDÝ I. 2004: Standardized pheromone-based system and propheromones for monitoring the horse chestnut leafminer, *Cameraria ohridella*. P.: 22. In: HOSKOVEC M. (ed.): *1st International Cameraria Symposium, Cameraria ohridella and Other Invasive Leaf-miners in Europe, IOCB Prague, March 24–27, 2004*. Prague: Institute of Organic Chemistry and Biochemistry AS CR, 49 pp.
- NEJMANOVÁ J., CVAČKA J., HRDÝ I., KULDOVÁ J., MUCK A. jr. & SVATOŠ A. 2004: Residues of diflubenzuron on horse chestnut leaves and efficacy of insecticides against the horse leafminer (*Cameraria ohridella*) with notes on its parasitization. P.: 36.

- In: HOSKOVEC M. (ed.): *1st International Cameraria Symposium, Cameraria ohridella and Other Invasive Leaf-miners in Europe, IOCB Prague, March 24–27, 2004*. Prague: Institute of Organic Chemistry and Biochemistry AS CR, 49 pp.
- HRDÝ I., KULDOVÁ J., WIMMER Z., LENZ M. & GLEESON P.V. 2004: Laboratory and field trials with juvenogens as potential termite control agents. In: LASALLE J., PATTEN M. & ZALUCKI M. (eds.): *Abstracts of XXII International Congress of Entomology, Brisbane, Queensland, Australia, 15–21 August 2004*. Brisbane: Australian Entomological Society, CD-ROM.
- KINDL J. & HRDÝ I. 2005: Development of neotenicis induced by a temporary absence of functional reproductives in *Kaloterme flavicollis* (Isoptera: Kalotermitidae). *European Journal of Entomology* **102**: 307–311.
- NEJMANOVÁ J., CVAČKA J., HRDÝ I., KULDOVÁ J., MERTELÍK J., MUCK A. Jr., NEŠNĚROVÁ P. & SVATOŠ A. 2006: Residues of diflubenzuron on horse chestnut (*Aesculus hippocastanum*) leaves and their efficacy against the horse chestnut leafminer, *Cameraria ohridella*. *Pest Management Science* **62**: 274–278.
- WIMMER Z., KULDOVÁ J., HRDÝ I. & BENNETTOVÁ B. 2006: Can juvenogens, biochemically targeted hormonogen compounds, assist in environmentally safe insect pest management? *Insect Biochemistry and Molecular Biology* **36**: 442–453.
- HRDÝ I., KULDOVÁ J., HANUS R. & WIMMER Z. 2006: Juvenile hormone III, hydroprene and a juvenogen as soldier caste differentiation regulators in three Reticulitermes species: potential of JHAs in termite control. *Pest Management Science* **62**: 848–854.
- KULDOVÁ J., HRDÝ I. & JANŠTA P. 2007: The horse chestnut leafminer *Cameraria ohridella*: Chemical control and notes on parasitisation. *Plant Protection Science* **43** (2): 47–56.
- HRDÝ I. 2007: Current trends in juvenoid research with emphasis on social insects. *Entomological Research* **37**(Supplement 1): 28–29.
- JURČEK O., WIMMER Z., BENNETTOVÁ B., KULDOVÁ J., HRDÝ I. & DRASAR P. 2007: Steroidal compounds as carriers of juvenile hormone bioanalogs applicable in environmentally safe insect pest control. *Entomological Research* **37** (Supplement 1): 131–132.
- WIMMER Z., JURČEK O., JEDLIČKA P., HANUS R., KULDOVÁ J., HRDÝ I., BENNETTOVÁ B. & ŠAMAN D. 2007: Insect pest management agents: Hormonogen esters (Juvenogens). *Journal of Agriculture and Food Chemistry* **55**: 7387–7393.
- JEDLIČKA P., HRDÝ I., KULDOVÁ J. & WIMMER Z. 2007: The systemic effects of juvenoids on the red firebug *Pyrrhocoris apterus* and on the pea aphid *Acyrosiphon pisum* with data on life table response. *Pest Management Science* **63**: 1026–1035.
- ZÁVODSKÁ R., WEN CH.-J., HRDÝ I., SAUMAN I., LEE H.-J. & SEHNAL F. 2008: Distribution of corazonin and pigment dispersing factor in the cephalic ganglia of termites. *Arthropod Structure and Development* **37**: 273–286.
- WIMMER Z., WIMMEROVÁ M., JURČEK O., SVOBODOVÁ H., BENNETTOVÁ B., HRDÝ I., KULDOVÁ J., SAMAN D. & KOLEHMAINEN E. 2008: Insect pest management 2-(4-Hydroxybenzyl) cycloalkanol derivatives: A thirty-years story. In: ANONYMOUS (ed.): *Abstracts of XXIII International Congress of Entomology, Durban, South Africa, 6–12 July 2008*. Durban: International Convention Centre, CD-ROM.
- SVATOŠ A., KALINOVÁ B. & HRDÝ I. 2009: *Cameraria ohridella*: Ten years of sex pheromone and kairomone research. *Journal of Applied Entomology* **133**: 319–327.
- ZÁVODSKÁ R., WEN CH.-J., SEHNAL F., HRDÝ I., LEE H.-J. & SAUMAN I. 2009: Corazonin- and PDF-immunoreactivities in the cephalic ganglia of termites are not affected by caste and circadian time. *Journal of Insect Physiology* **55**: 441–449.

Proceedings

- HRDÝ I. (ed.) 1960: *The Ontogeny of Insects. Acta Symposii de Evolutione Insectorum*. Praha: Publication House of the Academy of Sciences of the Czech Republic, 406 pp.
- HRDÝ I. & HRDLÍČKOVÁ H. (eds.) 1980: *Integrated Protection in Fruit Orchards. Proceedings of the Symposium in Vodňany, 1979*. Praha: Institute of Entomology, 125 pp (in Czech).
- HRDÝ I. & HRDLÍČKOVÁ H. (eds.) 1981: *Integrated Pest and Diseases Control in Hops. Symposium in Liblice (Czechoslovakia)*. *IOBC/WPRS Bulletin* **4**(3): 1–179.
- HRDÝ I. & HRDLÍČKOVÁ H. (eds.) 1984: *Integrated Pest and Disease Control in Hops. Symposium in Freising (Germany)*. *IOBC/WPRS Bulletin* **7**(6): 1–79.
- HRDÝ I. & HRDLÍČKOVÁ H. (eds.) 1986: *Integrated Fruit Production. Proceedings of the Symposium in České Budějovice, 1984*. Praha: Institute of Entomology, 183 pp (in Czech).
- CAMPBELL C. A. M. & HRDÝ I. (eds.) 1988: *Integrated Pest and Disease Control in Hops. Symposium in East-Malling (England)*. *IOBC/WPRS Bulletin* **11**(5): 1–99.
- HRDÝ I. (ed.) 1991: *Insect Chemical Ecology: Proceedings of a Conference held in Tábora, Czechoslovakia, 1990*. Praha & the Hague: Academia & SPB Academic Publishing House, 513 pp.
- HRDÝ I. (ed.) 1991: *[Bio-pesticides in Agriculture]*. Praha: Ministry of Agriculture of the Czech Republic, 108 pp (in Czech).

Václav Skuhravý