

# CURRICULUM VITAE



| <b>A. BUTIR-BUTIR PERIBADI</b> ( <i>Personal Details</i> )     |   |  |                                     |
|--|---|--|-------------------------------------|
| Nama Penuh ( <i>Full Name</i> )                                | Ho Chai Ling                                      |  | Gelaran ( <i>Title</i> ): Professor |
| No. MyKad / No. Pasport<br>( <i>Mykad No. / Passport No.</i> ) | Warganegara<br>( <i>Citizenship</i> )<br>Malaysia | Bangsa ( <i>Race</i> )<br>Chinese        | Jantina ( <i>Gender</i> )<br>Female |
| Jawatan ( <i>Designation</i> )                                 | Professor   | Tarikh Lahir<br>( <i>Date of Birth</i> ) |                                     |

| <b>Alamat Semasa</b> ( <i>Current Address</i> )   | <b>Jabatan/Fakulti</b> ( <i>Department/Faculty</i> )  | <b>E-mel dan URL</b> ( <i>E-mail Address and URL</i> )                   |
|---|---|--|
| Department of Cell and Molecular Biology<br>Faculty of Biotechnology and Biomolecular Sciences, Universiti Putra Malaysia<br><br>Tel: 03-97697475 | Department of Cell and Molecular Biology<br>Faculty of Biotechnology and Biomolecular Sciences, Universiti Putra Malaysia<br><br>Tel: 03-97697475 | E-mail: <a href="mailto:clho@upm.edu.my">clho@upm.edu.my</a><br><br>URL: |

| <b>B. KELAYAKAN AKADEMIK</b> ( <i>Academic Qualification</i> )            |   |                                   |  |
|---|---|-----------------------------------|--|
| Nama Sijil / Kelayakan<br>( <i>Certificate / Qualification obtained</i> ) | Nama Sekolah Institusi<br>( <i>Name of School / Institution</i> ) | Tahun<br>( <i>Year obtained</i> ) | Bidang pengkhususan<br>( <i>Area of Specialization</i> ) |
| PhD   | Chiba University  | 1999                              | Plant Molecular Biology                                  |
| M.Biotech   | University of Malaya  | 1995                              | Seaweed Biotechnology                                    |
| B.Sc.(Hons.)  | Universiti Kebangsaan Malaysia                                    | 1992                              | Biological Sciences                                      |

| <b>C. KEMAHIRAN BAHASA</b> ( <i>Language Proficiency</i> ) |                          |                                  |                         |                                   |                                   |
|--|--------------------------|----------------------------------|-------------------------|-----------------------------------|-----------------------------------|
| Bahasa / <i>Language</i>                                   | Lemah<br><i>Poor (1)</i> | Sederhana<br><i>Moderate (2)</i> | Baik<br><i>Good (3)</i> | Amat Baik<br><i>Very good (4)</i> | Cemerlang<br><i>Excellent (5)</i> |
| English  |                          |                                  |                         | √                                 |                                   |
| Bahasa Melayu  |                          |                                  |                         | √                                 |                                   |
| Chinese  |                          |                                  | √                       |                                   |                                   |
| Lain-lain ( <i>other</i> ):                                |                          |                                  |                         |                                   |                                   |

**D. PENGALAMAN SAINTIFIK DAN PENGGHUSUSAN***(Scientific experience and Specialisation)*

| <i>Organization</i>       | <i>Position</i>                  | <i>Start Date</i> | <i>End Date</i> | <i>Expertise</i>   |
|---------------------------|----------------------------------|-------------------|-----------------|--|
| Universiti Putra Malaysia | Lecturer/ Principal investigator | 2000              |                 | Crop plant and seaweed molecular biology and functional genomics |

**E. PEKERJAAN (Employment)**

| <i>Majikan / Employer</i> | <i>Jawatan / Designation</i>                 | <i>Jabatan / Department</i> | <i>Tarikh Iantikan / Start Date</i> | <i>Tarikh tamat / Date Ended</i> |
|---------------------------|--|-----------------------------|-------------------------------------|----------------------------------|
| Universiti Putra Malaysia | Lecturer<br>Associate Professor<br>Professor | Cell and Molecular Biology  | 2000<br>2006<br>2016                | 2006<br>2016                     |

**F. ANUGERAH DAN HADIAH (Honours and Awards)**

| <i>Name of awards</i>      | <i>Title</i>   | <i>Award Authority</i>   | <i>Award Type</i>  | <i>Year</i>   |
|----------------------------|--|--|--|---|
| <i>Academic Awards</i>     | MONBUSHO Scholarship<br>UM Fellowship  | Japanese Government<br>UM  | Scholarship<br>Scholarship   | 2001<br>1992-1994   |
| <i>Non-Academic Awards</i> | Perkhidmatan Cemerlang<br>Anugerah Perkhidmatan Cemerlang  | FBSB, UPM<br>UPM   |  | 2003-2016<br>2006, 2010, 2014   |
| <i>Awards of Merit</i>     | 1. Gold medal winner for poster at the Exhibition of Invention, Research & Innovation UPM 2012<br>2. Silver and Bronze medals winner for posters at the Exhibition of Invention, Research & Innovation UPM 2011<br>3. Winner of the Great Illumina 10G Challenge for Malaysia<br>4. 2008-9 Fulbright Scholarship<br>5. 2009 Poster award for Animal/Bioinformatics Category for the 18th MSMBB meeting<br>6. 2007 Best poster for Conference on Plantation Commodities<br>7. 2007 Best poster for PIPOC 2007 International Palm Oil Congress<br>8. 2006 Bronze medal winner for poster at the Exhibition of Invention, Research and Innovation UPM 2006<br>9. 2003 Bronze medals for 4 posters at the Exhibition of Invention, Research and Innovation UPM 2003<br>10. 2002 Silver Medal for the invention/innovation of Algal Biotechnology at Expo S&T 2002, 2-4 November 2002, Kuala Lumpur. Ministry of Science, Technology and the Environment of Malaysia.<br>11. 2002 Silver medals winner for 2 posters at the Exhibition of Invention, Research and Innovation UPM 2002 | UPM<br><br>UPM<br><br>Illumina<br><br>Department of State of U.S.A. MSMBB<br><br>Conference on Plantation Commodities<br><br>PIPOC 2007 International Palm Oil Congress<br><br>UPM<br><br>UPM<br><br>Ministry of Science, Technology and the Environment of Malaysia.<br><br>UPM | Poster award<br><br>Poster award<br><br>Award<br><br>Scholarship<br>Poster award<br><br>Poster award<br><br>Poster award<br><br>Poster award<br><br>Poster award<br><br>Poster award<br><br>Poster award | 2012<br><br>2011<br><br>2010<br><br>2008-2009<br>2009<br><br>2007<br><br>2007<br><br>2006<br><br>2003<br><br>2002<br><br>2002 |

**G. SENARAI PENERBITAN (Sila masukan nama pengarang, tajuk, nama jurnal, jilid, muka surat dan tahun diterbitkan)** (*List of publications – author (s), title, journal, volume, page and year published*)

| Journal |   |
|---------|---|
|         | <ol style="list-style-type: none"> <li>1. <b>Ho C-L</b>, Phang S-M and Pang T (1995) Molecular characterization of <i>Sargassum polycystum</i> and <i>S. siliquosum</i> (Phaeophyta) by polymerase chain reaction (PCR) using random amplified polymorphic DNA (RAPD) primers. <i>J. Appl. Phycol.</i> <b>7</b>, 33-41. [IF:2.492]</li> <li>2. <b>Ho C-L</b>, Phang S-M and Pang T (1995) Application of polymerase chain reaction (PCR) using random amplified polymorphic DNA (RAPD) primers in the molecular identification of selected <i>Sargassum</i> species (Phaeophyta, Fucales). <i>Eur. J. Phycol.</i> <b>30</b>, 273-280. [IF:2.338]</li> <li>3. Saito K, Takagi Y, <b>Ho C-L</b>, Takahashi H and Noji M (1997) Molecular cloning, characterization and expression of cDNA encoding phosphoserine aminotransferase involved in phosphorylated pathway of serine biosynthesis from spinach. <i>Plant Mol. Biol.</i> <b>33</b>, 359-366. [IF:4.072]</li> <li>4. <b>Ho C-L</b>, Noji M, Saito M, Yamazaki M and Saito K (1998) Molecular characterization of plastidic phosphoserine aminotransferase in serine biosynthesis from <i>Arabidopsis</i>. <i>Plant J.</i> <b>16</b>, 443-452. [IF:6.815]</li> <li>5. <b>Ho C-L</b>, Noji M, Saito M and Saito K (1999) Regulation of serine biosynthesis in <i>Arabidopsis</i>: Crucial role of 3-phosphoglycerate dehydrogenase in non-photosynthetic tissues. <i>J. Biol. Chem.</i> <b>274</b>, 397-402. [IF:4.600]</li> <li>6. <b>Ho C-L</b>, Noji M and Saito K (1999) Plastidic pathway of serine biosynthesis: Molecular cloning and expression of 3-phosphoserine phosphatase from <i>Arabidopsis thaliana</i>. <i>J. Biol. Chem.</i> <b>274</b>, 11007-11012. [IF:4.600]</li> <li>7. <b>Ho C-L</b> and Saito K (2001) Molecular biology of plastidic phosphorylated serine biosynthetic pathway in <i>Arabidopsis thaliana</i>. <i>Amino Acids</i> <b>20</b>, 243-259. [IF:3.653]</li> <li>8. <b>Ho CL*</b>, Harikrishna K, Kodi Isparan K, Chin CF, and Siti Suhaila AR (2003) Variation in turfgrasses demonstrated by amplified fragment length polymorphism (AFLP). <i>Asia Pac. J. Mol. Biol. Biotech.</i> <b>11</b>, 51-55.</li> <li>9. Chan C-X, Teo SS, <b>Ho C-L*</b>, Othman RY, and Phang S-M (2004) Optimisation of RNA extraction for marine red alga, <i>Gracilaria changii</i> (Gracilariales, Rhodophyta). <i>J. Appl. Phycol.</i> <b>16</b>, 297-301. [IF:2.492]</li> <li>10. Teo CH, Tan, S. H., <b>Ho C. L.</b>, Faridah, Q. Z., Othman, R. Y., Heslop-Harrison, J. S., Kalender, R., and Schulman, A. H. (2005) Genome constitution and classification using retrotransposon-based markers in the orphan crop banana. <i>J. Plant Biol.</i> <b>48</b>, 96-105. [IF:1.284]</li> <li>11. Chan C-X, <b>Ho C-L</b>, and Phang S-M (2006) Trends in seaweed research. <i>Trends Plant Sci.</i> <b>11</b>, 165-166. [IF:14.220]</li> <li>12. Nguyen PD, <b>Ho C-L*</b>, Harikrishna JA, Wong MVL, and Raha AR (2006) Generation and analyses of expressed sequence tags from the mangrove plant, <i>Acanthus ebracteatus</i> Vahl. <i>Tree Genet. Genomes</i> <b>2</b>, 196-201. [IF:2.435]</li> <li>13. Teo S-S, <b>Ho C-L*</b>, Teoh S, Lee W-W, Tee J-M, Raha AR and Phang S-M (2007) Analyses of expressed sequence tags (ESTs) from an agarophyte, <i>Gracilaria changii</i> (Gracilariales, Rhodophyta). <i>Eur. J. Phycol.</i> <b>42</b>, 41-46. [IF:2.338]</li> <li>14. Wong Y-Y, <b>Ho C-L*</b>, Teo S-S, Nguyen PD., Teo S-S, Harikrishna JA, Wong MVL, and Raha AR (2007) Isolation of salinity tolerant genes from the mangrove plant, <i>Bruguiera cylindrica</i> (L.) Blume by using suppression subtractive hybridization (SSH) and bacterial functional screening. <i>Aquat. Bot.</i> <b>86</b>, 117-122. [IF:1.471]</li> <li>15. Wong TK-M, <b>Ho C-L*</b>, Lee W-W, Raha AR and Phang S-M (2007) Analyses of expressed sequence tags (ESTs) from <i>Sargassum binderi</i> (Phaeophyta). <i>J. Phycol.</i> <b>43</b>, 528-534. [IF:2.529]</li> <li>16. Nguyen PD, <b>Ho C-L*</b>, Harikrishna JA, Wong MVL, and Raha AR (2007) Functional screening for salinity tolerant genes from <i>Acanthus ebracteatus</i> Vahl using <i>Escherichia coli</i> as a host. <i>Trees</i> <b>21</b>, 515-520. [IF:2.154]</li> <li>17. Chan K-L, <b>Ho C-L*</b>, Namasivayam P and Suhaimi N (2007) A simple and rapid method for RNA isolation from plant tissues with high phenolic compounds and polysaccharides. <i>Nature Protocols</i></li> </ol> |

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18. **Ho C-L\***, Kwan Y-Y, Choi M-C, Tee S-S, Ng W-H, Lim K-A, Lee Y-P, Ooi S-E, Lee W-W, Tee J-M, Tan S-H, Kulaveerasingam H, Alwee SSRS, Abdullah MO (2007) Analysis and functional annotation of expressed sequence tags (ESTs) from multiple tissues of oil palm (*Elaeis guineensis* Jacq.) *BMC Genomics* **8**, 381. [IF:4.040]
19. Wong Y-C, **Ho C-L\***, Harikrishna K, Mohd Zain A, Suhaimi N and Faridah QZ (2007) Analyses of expressed sequence tags (ESTs) from rice panicles of the *indica* rice cultivar MR84 during reproductive and grain filling stages and molecular characterization of ADP-glucose pyrophosphate small subunit. *Asia Pac. J. Mol. Biol. Biotech.* **15**, 81-90.
20. Seng TY, Faridah QZ, **Ho C-L**, Maizura I and Rao V (2007) Flanking AFLP markers for the *Virescens* trait in oil palm. *J. Oil Palm Res.* **19**, 381-392. [IF: 0.230]
21. **Ho C-L\***, Nguyen PD, Harikrishna JA and Raha AR (2008) Sequence analysis and characterization of vacuolar-type H<sup>+</sup>-ATPase proteolipid transcript from *Acanthus ebracteatus* Vahl. *DNA Sequence* **19**, 73-77. [IF:0.750]
22. Nguyen PD, **Ho C-L\***, Teo S-S, Harikrishna JA and Raha AR (2008) Sequence and transcript analyses of antioxidant genes from *Acanthus ebracteatus* Vahl. *Tree Genet. Genomes* **4**, 705-713. [IF:2.435]
23. Omar AR, Wan Nur Syuhada WS, Nor Hanin A, Masura SS, Abdul Masani MY, **Ho CL**, Suhaimi N, Zulqarnain M and Sambanthamurthi R (2008). RTPCR amplification and cloning of partial DNA sequence coding for oil palm (*Elaeis oleifera*) phytoene synthase gene. *Asia Pac. J. Mol. Biol. Biotech.* **16**, 17-24.
24. Abdul Masani MY, Ahmad Parveez GK, and **Ho C-L** (2008) Transgenic plants producing polyhydroxyalkanoates. *Asia Pac. J. Mol. Biol. Biotech.* **16**,1-10.
25. Abdul Masani MY, **Ho, C. L.** and Ahmad Parveez, G.K. (2008) Construction of PHB and PHBV transformation vectors for bioplastic production in oil palm. *J. Oil Palm Res. Special Issue on Malaysia-MIT Biotechnology Partnership Programme.* **2**, 37-55. [IF: 0.230]
26. Omar AR, Parveez Ghulam KA, **Ho CL**, Sambanthamurthi R, and Suhaimi N (2009) Plant carotenoids: molecular genetics and regulation. *J. Oil Palm Res.* **21**, 588-601. [IF: 0.230]
27. **Ho C-L\***, Teoh S, Raha AR and Phang S-M (2009) Transcriptomic analysis of *Gracilaria changii* (Rhodophyta) in response to low irradiance. *Mar. Biotechnol.* **11**, 513-519. [IF:3.152]
28. Chan K-L, **Ho C-L\***, Namasivayam P and Suhaimi N (2009) Isolation of floral transcripts from mangosteen (*Garcinia mangostana* L.). *Trees* **23**, 899-910. [IF:2.154]
29. Teo S-S, **Ho C-L\***, Teoh S, Raha AR and Phang S-M (2009) Transcriptomic analysis of *Gracilaria changii* (Rhodophyta) in response to hyper- and hypo-osmotic stresses. *J. Phycol.* **45**, 1093-1099. [IF:2.529]
30. Ho WY, Ky H, Yeap SK, Raha AR, Omar AR, **Ho CL**, and Alitheen NB (2009) Traditional practice, bioactivities and commercialization potential of *Elephantopus scaber* Linn. *J. Med. Plants Res.* **3**, 1212-1221.
31. Roowi SH, **Ho C-L**, Alwee SSRS, Abdullah MO, and Suhaimi N (2010) Isolation and characterization of differentially expressed transcripts from the suspension cells of oil palm (*Elaeis guineensis* Jacq.) in response to different concentration of auxins. *Mol. Biotechnol.* **46**, 1-19. [IF:2.275]
32. Lim K-A, Shamsuddin ZH, and **Ho C-L\*** (2010) Transcriptomic changes in the root of oil palm (*Elaeis guineensis* Jacq.) upon inoculation with *Bacillus sphaericus* UPMB10. *Tree Genet. Genomes* **6**,793-800. [IF:2.435]
33. Sivakumar P, Law YS, **Ho C-L**, and Harikrishna JA (2010) High frequency plant regeneration from mature seed of elite, recalcitrant Malaysian Indica rice (*Oryza sativa* L.) cv. MR 219. *Acta Biol. Hung.* **61**, 313-321. [IF:0.793]
34. Omidvar V, Abdullah SNA, Izadfard A, **Ho CL**, and Mahmood M (2010) The oil palm metallothionein promoter contains a novel AGTTAGG motif conferring its fruit-specific expression

and is inducible by abiotic factors. *Planta* **232**, 925–936. [IF:3.376]

35. **Ho C-L\***, Teo SS, Raha AR and Phang S-M (2011) Transcripts of *Gracilaria changii* that improve copper tolerance of *Escherichia coli*. *Asia Pac. J. Mol. Biol. Biotech.* **18**, 315-319.
36. Thuc LV, Sarpan N, Ky H, Ooi S-E, Napis S, **Ho C-L**, Ong-Abdullah M, Chin C-F, and Namasivayam P (2011) A novel transcript of oil palm (*Elaeis guineensis* Jacq.), Eg707, is specifically upregulated in tissues related to totipotency. *Mol. Biotechnol.* **48**,156-64. [IF:2.275]
37. Nwe NT, Mahmood M, **Ho C-L**, Faridah QZ and Abdullah MZ (2011) Responses of some selected Malaysian rice genotypes to callus induction under *in vitro* salt stress. *African J. Biotech.* **10**, 350-362. [IF:0.570]
38. Lee WS, Li LP, **Ho CL**, and Harikrishna JA (2011) Identification of microRNA precursors in *Bruguiera* spp. *Bot. Mar.* **54**, 313–324. [IF:1.000]
39. Nwe NT, Mahmood M, **Ho C-L**, Faridah QZ and Abdullah MZ (2011) Regeneration capacity of cell suspension culture in Malaysian rice genotypes under salinity stress. *Asian J. Biotech.* **3**, 357-367.
40. Baharum H, Morita H, Tomitsuka A, Lee F-C, Ng K-Y, Raha AR, Abe I, and **Ho C-L\*** (2011) Molecular cloning, modeling and site-directed mutagenesis of type III polyketide synthase from *Sargassum binderi* (Phaeophyta). *Mar. Biotech.* **13**, 845–856. [IF:3.152]
41. Teo C-J, Sudha CV, Namasivayam P and **Ho C-L\*** (2011) Profiling the differentially expressed genes in two rice varieties during rapid grain-filling stages. *Acta Physiol Plant* **33**, 2259–2268. [IF:1.732]
42. Naher L, **Ho C-L\***, Tan SG, Yusuf UK, and Abdullah F (2011) Cloning of transcripts encoding chitinases from *Elaeis guineensis* Jacq. and their expression profiles in response to fungal infections. *Physiol. Mol. Plant Pathol.* **76**, 96-103. [IF:1.987]
43. Ho WY, Yeap SK, **Ho CL**, Raha AR, Suraini AA, and Alitheen NB (2011) *Elephantopus scaber* induces cytotoxicity in MCF-7 human breast cancer cells via p53-induced apoptosis. *J. Med. Plants Res.* **5**, 5741-5749.
44. Siow R-S, Teo S-S, Ho W-Y, Shukor MYA., Phang S-M, and **Ho C-L\*** (2012) Molecular cloning and biochemical characterization of galactose-1-phosphate uridylyltransferase from *Gracilaria changii* (Rhodophyta). *J. Phycology* **48**, 155–162. [IF:2.529]
45. Sultana S, Khew CY, Morshed MM, Namasivayam P, Napis S, and **Ho CL\*** (2012) Overexpression of monodehydroascorbate reductase (AcMDHAR) from a mangrove plant confers salt tolerance in rice. *J. Plant Physiol.* **169**, 311– 318. [IF:2.770]
46. Habib SH, Syed-Alwee SSR, **Ho C-L**, Ong-Abdullah M, Sinniah UR, and Namasivayam P (2012) Morpho-histological characterization of truncated leaf syndrome seedlings: an oil palm (*E. guineensis* Jacq.) somaclonal variant. *Acta Physiol. Plant.* **34**,17–28. [IF:1.732]
47. Naher L, Tan SG, Yusuf UK, **Ho C-L**, and Abdullah F (2012) Biocontrol agent *Trichoderma harzianum* strain FA 1132 as an enhancer of oil palm growth. *Pertanika J. Trop. Agric. Sci.* **35**,173-182.
48. Mohd. Yusoff NF, Syed-Alwee SSAR, Ong-Abdullah M, **Ho C-L**, and Namasivayam, P (2012) A time course anatomical analysis of callogenesis from young leaf explants of oil palm (*Elaeis guineensis* Jacq.). *J. Oil Palm Res.* **24**,1330-1341. [IF: 0.230]
49. Omidvar V, Abdullah SNA, **Ho CL**, Mahmood M, and Al-Shanfari AB (2012) Isolation and characterization of two ABRE-binding proteins: EABF and EABF1 from the oil palm. *Mol. Biol. Rep.* **39**, 8907–8918. [IF:1.958]
50. Naher L, Tan SG, Yusuf UK, **Ho CL**, and Siddiquee S (2012) Activities of chitinase enzymes in the oil palm (*Elaeis guineensis* Jacq.) in interactions with pathogenic and non-pathogenic fungi. *Plant Omics J.* **5**, 333-336. [IF:0.777]
51. Naher L, Tan SG, **Ho CL**, Yusuf UK, Ahmad SH, and Abdullah F (2012) mRNA expression of EgCHI1, EgCHI2, and EgCHI3 in oil palm leaves (*Elaeis guineensis* Jacq.) after treatment with *Ganoderma boninense* Pat. and *Trichoderma harzianum* Rifai. *Sci. World J.* **2012**, Article ID 647504.

52. Yeap W-C, Ooi TEK, Namasivayam P, Kulaveerasingam H, and **Ho C-L\*** (2012) EgRBP42 encoding a hnRNP-like RNA-binding protein from *Elaeis guineensis* Jacq. is responsive to abiotic stresses. *Plant Cell Rep.* **31**,1829–1843. [IF:2.936]
53. **Ho C-L**, Wu Y, Shen H-B., Provart NJ, and Geisler M (2012) A predicted rice interactome. *Rice* **5**,15. [IF:2.450]
54. Yeoh KA, Abrizah A, Faridah A, Sariah M, and **Ho CL\*** (2012) Sequence analysis and gene expression of putative exo- and endo-glucanases from oil palm (*Elaeis guineensis* Jacq.) during fungal infection. *J. Plant Physiol.* **169**,1565–1570. [IF:2.770]
55. Ho WY, Yeap SK, **Ho CL**, Abdul Rahim R, and Alitheen NB. (2012) Hepatoprotective activity of *Elephantopus scaber* on alcohol-induced liver damage in mice. *Evid- Based Comp. Alt Med.* **2012**, Article ID 417953. [IF:2.175]
56. Ho WY, Yeap SK, **Ho CL**, Rahim RA, and Alitheen NB (2012) Development of multicellular tumor spheroid (MCTS) culture from breast cancer cell and high throughput screening method using the MTT assay. *PLOS ONE* **7**, e44640. [IF:3.534]
57. Habib SH, Ooi S-E, Novák O, Tarkowská D, Rolčík J, Doležal K, Syed-Alwee SSR, **Ho C-L**, and Namasivayam P (2012) Comparative mineral and hormonal analyses of wild type and TLS somaclonal variant derived from oil palm (*Elaeis guineensis* Jacq. var. tenera) tissue culture. *J Plant Growth Regulation* **68**, 313-317. [IF:2.058]
58. Yeoh KA, Abrizah A, Faridah A, Sariah M, and **Ho CL\*** (2013) Molecular cloning and transcript analysis of chitinases from oil palm (*Elaeis guineensis* Jacq.). *Mol. Biol. Rep.* **40**,147–158. [IF: 2.506]
59. Omidvar V, Abdullah SNA, **Ho CL**, and Mahmood M (2013) Isolation and characterization of an ERE-binding protein; EgEREBP from oil palm. *Aust. J. Crop Sci.* **7**, 219-226. [IF: 1.632]
60. Sarpan N, Ooi S-E, Ong-Abdullah M, **Ho C-L**, Chin C-F, and Namasivayam P (2013) Representational difference analysis (RDA) for the identification of DNA marker's associated with tissue culture amenity in oil palm. *J. Oil Palm Res.* **25**, 305-313. [IF: 0.230]
61. Tee S-S, Tan Y-C, Abdullah F, Abdullah MO and **Ho C-L\*** (2013) Transcriptome of oil palm (*Elaeis guineensis* Jacq.) roots treated with *Ganoderma boninense*. *Tree Genet Genomes* **9**, 377–386. [IF:2.435]
62. Baharum H, Chu W-C, Teo S-S, Ng K-Y, Rahim RA, and **Ho C-L\*** (2013) Molecular cloning, homology modeling and site-directed mutagenesis of vanadium-dependent bromoperoxidase (GcVBPO1) from *Gracilaria changii* (Rhodophyta). *Phytochemistry* **92**, 49–59. [IF:3.350]
63. Sim M-C., **Ho C-L** and Phang S-M (2013) A simple and effective method for RNA isolation and cDNA library construction from the brown seaweed *Sargassum polycystum* (Fueales, Phaeophyceae). *J. Appl. Phycol.* **25**,1277-1285. [IF:2.492]
64. Siow R-S, Teoh S, Teo S-S, Abd Shukor MY, Phang S-M, and **Ho C-L\*** (2013) Molecular cloning and biochemical characterization of GDP-mannose epimerase from *Gracilaria changii*. *J. Appl. Phycol.* **25**,1309–1318. [IF:2.492]
65. Tan Y-C, Yeoh K-A, Wong M-Y, and **Ho C-L\*** (2013) Expression profiles of putative defence-related proteins in oil palm (*Elaeis guineensis*) colonized by *Ganoderma boninense*. *J. Plant Physiol.* **170**, 1455– 1460. [IF:2.770]
66. Omidvar V, Abdullah SNA, Ebrahimi M, **Ho CL**, and Mahmood M (2013) Gene expression of the oil palm transcription factor EgAP2-1 during fruit ripening and in response to ethylene and ABA treatments. *Biologia Plantarum* **57**, 646-654. [IF:1.692]
67. Naseron NAH, Lim K-A, Teh S-L, Teo S-S, Leow ATC, Namasivayam P, and **Ho C-L\*** (2014) Molecular characterization and homology modeling of a short-chain reductase/dehydrogenase from *Gracilaria changii* (Rhodophyta). *J. Appl. Phycol.* **26**, 665–674. [IF:2.492]
68. Lim FH, Iskandar NF, Rasid AO, Idris SS, Ahmad Parveez, GK, and **Ho C-L**, Shaharrudin NA (2014) Isolation and selection of reference genes for *Ganoderma boninense* gene expression study using quantitative real-time PCR (qPCR). *J. Oil Palm Res.* **26**,170-181. [IF: 0.230]

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| Chapter in book  | <ol style="list-style-type: none"> <li><b>Ho C-L</b>, Phang S-M, Sinnappah ND and Pang T (1996) Molecular approaches in the taxonomy of the red and brown seaweeds. <i>In</i> Cytology, genetics and molecular biology of algae. Chaudhary BR and Agrawal SB (eds). SPB Academic Publishing bv., Amsterdam. pp. 351-362.</li> <li><b>Ho CL</b>, Harikrishna JA and Harikrishna K (2002) Forest biotechnology: Scope and perspective. <i>In</i> Basic principles of biotechnology and their application in forestry. Asia Pacific Association of Forestry. pp. 67-74.</li> <li>Chan CX, <b>Ho C-L</b>, Othman RY and Phang SM (2004). Optimisation of RNA extraction for <i>Gracilaria changii</i> (Gracilariales, Rhodophyta). <i>In</i> Marine science into the new millenium: New perspectives and challenges. Phang S-M, Chong VC, Ho SC, Mokhtar N and Ooi JLS (eds.) University of Malaya Maritime Research Centre, Kuala Lumpur, pp. 477-487.</li> <li><b>Ho C-L</b> and Phang S-M (2006) Seaweed functional genomic research – the present and the future perspectives. <i>In</i> Advances in seaweed cultivation and utilization in Asia. Phang S-M, Critchley AT and Ang PO Jr (eds.) University of Malaya Maritime Research Centre, Kuala Lumpur. pp. 143 - 151.</li> <li><b>Ho C-L</b> and Yee WY (2017) RNA-seq analysis in plant-fungus interactions. <i>In</i> Crop Improvement: Sustainability through Leading-edge Technology. Abdullah SNAA, Ho C-L and Wagstaff C (eds.) Springer International Publishing AG, pp. 1-26.</li> <li>Lee WK, Lim YY, <b>Ho CL</b> (2022) Chapter 7 Gracilaria as the Major Source of Agar for Food, Health and Biotechnology Applications. <i>In</i>: Ambati Ranga Rao and Gokare A. Ravishankar (Eds) Sustainable Global Resources of Seaweeds. Volume 2 Food, Pharmaceutical and Health Applications. Springer Nature Switzerland AG, pp. 145-162.</li> </ol>  |
| Proceedings      |   |

| <b>H. PROJEK PENYELIDIKAN TERDAHULU</b> (Past Research Project) |   |                    |           |   |             |
|---|---|--------------------|-----------|---|-------------|
| Project No.   | Project Title   | Role               | Year      | Source of fund  | Status      |
|   | Expression and characterization of putative red algal chondroitin sulfotransferases in <i>Pichia pastoris</i> and <i>Chlamydomonas reinhardtii</i>  | Project leader     | 2023-2025 | Geran Putra IPS   | In progress |
| FRGS/1/2021/STG01/UPM/01/1                                      | Analysis of sequence-to-function relationship of putative red algal carbohydrate sulfotransferases and reconstruction of sulfated galactan biosynthetic pathway in <i>Chlamydomonas reinhardtii</i> | Project leader     | 2021-2024 | Fundamental Research Grant Scheme (FRGS) (Ministry of Higher Education) | Completed   |
| UPM/700-2/1/GPB/2018/9598300                                    | Molecular cloning and functional analysis of a novel necrosis and ethylene inducing protein from <i>Ganoderma boninense</i> , the causal agent of basal stem rot (BSR) disease in oil palm          | Project leader     | 2018-2020 | Putra Berimpak (Universiti Putra Malaysia)                              | Completed   |
| FRGS/1/2016/STG05/UPM/02/18/                                    | Analysis of single nucleotide polymorphisms (SNPs) of rice gene (LOC_Os03g32580) encoding putative BRASSINOSTEROID-INSENSITIVE 1-associated receptor kinase in relation to yield traits             | Project leader     | 2016-2020 | Fundamental Research Grant Scheme (FRGS) (Ministry of Education)        | Completed   |
| GP-IPS/2016/9487700   | Identification and analysis of protein markers for screening of agar yield and gel strength in <i>Gracilaria</i> species  | Project leader     | 2016-2018 | Putra Siswazah (Universiti Putra Malaysia)                              | Completed   |
| GP-IPB/2015/9451200   | Cloning and characterization of transcripts encoding fungal lignin degrading enzymes from <i>Ganoderma</i> sp.  | Project leader     | 2015-2017 | Putra Siswazah (Universiti Putra Malaysia)                              | Completed   |
| GP-IPB/2013 /9413601  | Subproject1: Development of A Work-flow for High Throughput Sequence Analysis in A Web-based Portal with Oil Palm Defensome Data  | Sub-Project leader | 2013-2016 | Putra Berkumpulan (Universiti Putra Malaysia)                           | Completed   |
| 02-01-04-SF1282   | Development of Expressed Markers for <i>Gracilaria</i> Species With Higher Yield and Quality of Agar  | Project leader     | 2012-2014 | eScienceFund (Ministry of Science, Technology and Innovation)           | Completed   |
| 07-01-12-1099FR   | Conserved Structural Features of  | Project leader     | 2012-2014 | Fundamental Research Grant  | Completed   |

|                |  |                |           |  |           |
|----------------|--|----------------|-----------|--|-----------|
|                | Galactosyltransferases from An Agar Producing Seaweed, <i>Gracilaria changii</i>                   |                |           | Scheme (FRGS) (Ministry of Education)      |           |
| 9300368        | Molecular Characterization of Oil Palm cDNAs Involved During Host-pathogenic Interactions          | Project leader | 2011-2012 | Putra Siswazah (Universiti Putra Malaysia) | Completed |
| 01-04-10-769FR | Profiling the transcriptome of <i>Gracilaria changii</i> through massively parallel RNA-sequencing | Project leader | 2010-2012 | FRGS                                       | Completed |

Other completed projects before 2011 were not listed.

| <b>I. ID PUBLISHING</b> ( <i>Publishing ID</i> ) |                  |                  |
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|  | <b>Author ID</b> | <b>Name</b>      |
| <i>Scopus</i>                                    | 1. 7404653195    | 1. Ho, Chai-Ling |
| <i>ORCID</i>                                     |                  |                  |
| <i>Web of Science ID</i>                         |                  |                  |
| <i>Researcher ID</i>                             |                  |                  |
| <i>Others</i>                                    |                  |                  |