EXPLORING THE LEGAL ASPECTS AND COURT PROCESS OF FORENSIC ENTOMOLOGY FROM THE MALAYSIA'S PERSPECTIVE

Suzana Muhamad Said^{1*} & Raja Muhammad Zuha Raja Kamal Bashah²

¹Faculty of Economics and Management, Universiti Kebangsaan Malaysia, 43650 Bangi, Selangor, Malaysia ²Faculty of Health Sciences, Universiti Kebangsaan Malaysia, 43650 Bangi, Selangor, Malaysia *Corresponding email: *drsuzana@ukm.edu.my*

ABSTRACT

This paper seeks to explore the legal aspects and court process relating to forensic entomology with reference to Malaysia. It aims to inform the non-legal person of the court process and giving of evidence in Malaysia's court by expert witnesses such as forensic entomologist. The methodology used is a socio-legal analysis with reference to legal texts and statutes in Malaysia. Online search on the number of reported cases published in two legal journals relating to evidence by forensic entomologist was conducted. The finding from the reported cases where entomologist testify in court as an expert witness is scarce and so few assumptions were made on this. A brief case studies on the selected reported cases were chosen to explain the use of forensic entomology in the court process. This paper suggests that entomologists' evidence on the issue of the time of death is important as accordingly, a charge sheet in the homicide cases must contain the time of death and prove in court. It is also suggested that recognition is given to forensic entomologists and that the Allied Health Professions Act 2016 [Act 774] which to regulate the practise of allied health of professionals including entomologists, be in force soon.

Keywords: Court process, forensic entomology, Allied Health Professions Act 2016 [Act 774], Malaysia.

ABSTRAK

Kertas ini bertujuan meneroka aspek undang-undang dan proses pengadilan yang berkaitan dengan entomologi forensik dengan merujuk kepada Malaysia. Kertas ini juga bertujuan memaklumkan kepada orang ramai tentang proses mahkamah dan keterangan saksi pakar seperti ahli entomologi di mahkamah Malaysia. Metodologi yang digunakan ialah analisis sosioperundangan yang merujuk teks undang-undang dan statut di Malaysia. Carian dalam talian tentang jumlah kes yang dilaporkan dalam dua jurnal undang-undang yang berkaitan dengan keterangan oleh ahli entomologi forensik telah dijalankan. Hasil penemuan ialah bilangan kes-kes yang dilaporkan berkaitan keterangan ahli entomologi di mahkamah sebagai seorang saksi pakar adalah sangat kurang dan beberapa andaian telah dibuat tentang perkara ini. Kajian ringkas tentang kes yang dilaporkan tersebut telah dipilih bagi menerangkan berkaitan entomologi forensik dalam proses mahkamah. Kertas ini mencadangkan bahawa

keterangan pakar entomologi tentang isu masa kematian adalah penting apatah lagi kertas pertuduhan dalam kes-kes homisid mesti mengandungi masa kematian dan dibuktikan di mahkamah. Kertas ini juga mencadangkan supaya pengiktirafan diberikan kepada profesion entomologi dan supaya Akta Profesion Kesihatan Bersekutu 2016 [Akta 774] yang akan mengawal selia amalan kesihatan bersekutu profesional termasuk ahli entomologi, berkuat kuasa dalam masa terdekat.

Kata kunci: Proses mahkamah, entomologi forensik, Akta Profesion Kesihatan Bersekutu 2016 [Akta 774], Malaysia.

INTRODUCTION

Forensic science is important because it helps to establish the guilt or innocence of an accused. Forensic evidence is useful to link the crimes committed, which establishes the patterns of crimes and also narrows the number of probable suspects. There are various areas of forensic science including forensic entomology. This paper will explore the application of forensic entomology in the court proceedings in Malaysia and ancillary matters therein. This paper will also suggest that the profession of forensic entomologists be given proper recognition for its contribution and significant role in assisting the court process.

Basically, forensic entomology is a study of insects and other arthropods in a legal context (Hall & Brandt 2006). It relates to a criminal investigation as a scientific evidence most frequently used to estimate the time of death known as 'post mortem interval' (PMI) when circumstances surrounding death is unknown. The method is by identifying the age of the insects present on a human corpse, to provide a relatively precise estimate in circumstances (Hall & Brandt 2006; Zuha & Ramalinggam 2017). Presumption as to the time of death is that the age of the oldest insects on the body determines the minimum PMI (Hall & Brandt 2006). Forensic entomology can be used to determine whether the body has been moved from one site to another, whether the body has been disturbed after death, the position and presence of wounds, etc., but its primary use is to determine time of death (Anderson 2001). Forensic science, by its very nature, has to do with legal matters and legal questions (Lee 1993). Thus, the importance of forensic entomology in court is its assistance to unravel the estimate time of death.

OBJECTIVE

This paper seeks to explore the process of court in Malaysia relating to forensic entomology. It is the objective of the paper to inform the general public and non-legal person of the court process and how evidence of expert especially entomologist is applicable in court. This paper will also show the importance of forensic entomology and evidence by entomologist as expert witness to testify in the court of law.

METHODOLOGY

The methodology used is a socio-legal analysis with reference to legal journals and statutes with reference to Malaysia. Explanation of the court process relating to the importance of the time of death to be incorporated in the charge sheet and to be proved in court were discussed. Evidence by entomologist was also elaborated. Systematic search on the number of cases involving forensic entomologist was conducted on two online legal journals namely the

ISSN 1394-5130

Malayan Law Journal (MLJ) and the Current Law Journal (CLJ) to identify the number of cases using the keyword 'evidence', 'forensic', 'time of death' and 'entomologists.' Cases with the keyword 'entomologist' were then selected to show example where evidence given by entomologist are applicable in court as part of the court process. Two case studies were also briefly discussed. The hindsight is that there was minimal elaboration in those reported cases on the evidence where entomologist testify in court.

Forensic Entomology as Evidence in Court

Forensic entomology becomes important in the eyes of law in relation to the crime scene investigation when the time of death is unknown. The question is how accurate is the evidence in ascertaining the time of death? In the case of Graham Stuart Stafford v R (2009), a forensic entomologist who testified in that case described time estimation on the death as "best guess". The forensic entomologist says in her report that "nobody should be led to believe that forensic entomology is capable of such a fine level of accuracy" as there are many factors that may cause variations.

There are two main ways of using insects to determine elapsed time since death; using successional waves of insects and using maggot age and development (Anderson, 2018). According to Nor Aliza (2017), the roles of forensic entomologist before analysis can be conducted are: proper collection of specimen from dead bodies, preservation of insects, mounting of insects, identification of insects and proper storage of insects. All these need to be done with detailed and correct procedure.

Charge must contain details of the offence

Generally, forensic entomology is applicable for example, in cases involving crime such as murder where the time of death of the victim is most important. The charge sheet has to fulfil certain requirements as provided under the Criminal Procedure Code (CPC) of Malaysia [Act 593]. It is also as a matter of human rights as enshrined in the Federal Constitution of Malaysia that a person cannot be wronged until proven guilty and any accusation or allegation must be clearly informed and proved in the court of law. It matters to the judiciary in ensuring fairness of proceedings and upholding the rule of law (Thomas 2015). The accused must be given a fair trial and the right to defend. Therefore, a charge cannot be defective. Section 152 of the CPC provides the form of the charge while section 153 of the CPC provides that the charge must contain the details of the offence including time, place and the person whom the offence was committed, so that reasonable notice is given to the accused. Section 172 of the CPC provides that the charge shall be prescribed as per its Second Schedule. The form for a murder charge sheet is normally in the following manner: "That you (the accused), on or about the day of (time/date), at (place), committed murder by causing the death of (victim), and thereby committed an offence punishable under section 302 of the Penal Code." Section 302 of the Penal Code (PC) deals with the offence of murder.

In the case of Jitweer Singh a/l Ojagar Singh v Public Prosecutor (2016), the Court of Appeal in Putrajaya held that 'the time of death of the deceased was inconsistent with the charge against the accused." At the end of the prosecution's case, the Court of Appeal held that the prosecution has failed to prove a *prima facie case* against the accused and re-affirmed the decision of the High Court. The accused was discharged and acquitted of the charge against him. The facts were that the accused, a medical doctor was charged under section 302 of the Penal Code for the murder of his wife, Shentho Kaur a/p S. Jaswant Singh at their matrimonial home. However, there was discrepancy as to the time of death and the particulars in the charge

ISSN 1394-5130

sheet, among other things. The prosecution appealed to the Court of Appeal but the appeal was dismissed. The prosecution further appealed to the Federal Court which overturned the verdict on the basis that "the deceased did not die from natural causes but had multiple injuries and died from asphyxia. There was no suggestion that the injuries were self-inflicted. The trial court (High Court) should have accepted the conclusion of the pathologist and not rejected it. This court was satisfied beyond all reasonable doubt that the cause of death was not accidental and not suicidal but homicidal." The accused was called for defence. This case shows that the time of death is vital to indicate the link between the crime and the occurrence of death. Time of death is important as it must be stated in the charge sheet which could lead to a defective charge and therefore, risk a non-conviction.

Post mortem examination

In the case of R v Yashney (1994), the court held that one of the applications of forensic entomology is in the science of post mortem analysis. Section 331 of the CPC provides for the post mortem examination of a body upon information under section 330 relating to the duty of a police officer making an investigation under section 329. The section provides that if there appears to that officer, any reason to suspect that the deceased came by his death in a sudden or unnatural manner or by violence or that his death resulted in any way from or was accelerated by any unlawful act or omission on the part of any other person, the officer must at once inform the nearest Government Medical Officer. Cause of death under section 328 of the CPC "include not only the apparent cause of death as ascertainable by inspection or post-mortem examination of the body of the deceased, but also all matters necessary to enable an opinion to be formed as to the manner in which the deceased came by his death and as to whether his death resulted in any way from, or was accelerated by, any unlawful act or omission on the part of any other person." In the case of Teoh Meng Kee v Public Prosecutor (2014), the Appeal Court of Malaysia held that "It will be noted that s 328 of the CPC speaks of opinion. Although s 328 of the CPC is silent on the standard of proof, of course, it cannot be said that there is no standard to be applied. There must be sufficient evidence to arrive at an opinion, in particular whether the death resulted in any way from or was accelerated by any unlawful act or omission on the part of any other person." The case was an appeal on the decision of the inquest conducted by a coroner on the death of Teoh Beng Hock who fell from the Malaysia Anti-Corruption Agency (MACC) building.

Entomologist as an expert to testify in court

Utilization of insects to determine PMI time is useful especially when under circumstances where pathologist can only give broad approximation (Nor Aliza 2017). Apart from the importance to know about the time of death and cause of death, the evidence given must also be admissible. Entomological evidence is evidence given by an expert in its field. Under section 45 of the Evidence Act of Malaysia [*Act 56*], a person is called an expert and can be called as an expert witness in court when "the court has to form an opinion upon a point of foreign law or of science or art, or as to identity or genuineness of handwriting or finger impressions, the opinions upon that point of persons specially skilled in that foreign law, science or art, or in questions as to identity or genuineness of handwriting or finger impressions, are relevant facts." Thus, the requirements applicable for a forensic entomologist under section 45 of the Evidence Act are that the court has to form an opinion upon a point of science and the opinion is from a person specially skilled in that science to be of relevant facts. Therefore, it is very much a shared interest for both the scientific and legal professions to ensure that those who provide expert evidence to the courts have quality and integrity (Thomas 2015). The role of the forensic scientist in the courtroom is always as an unbiased participant (Thomas 2015).

ISSN 1394-5130

testimony is under oath. The issue of credibility of the entomology experts often raise questions such as: is the "expert" qualified? Is the opinion supported by scientific principles? Is the opinion based on reliable data? And finally, is the opinion so confusing or prejudicial that it should be excluded? If the answer to any three is no, the evidence can be challenged in court. Therefore, the expert should be aware of and avoid inconsistent statements, and if these become necessary, for instance, because of new scientific knowledge, the expert should be prepared to explain inconsistencies (Byrn & Castner 2009).

Close of prosecution case

At the close of a prosecution's case when all the evidence have been presented in court, it is the duty of the court to consider whether a prima facie case has been made out against the accused as prescribed under section 180 of the CPC. If a prima facie case has not been made out, the court is bound to record an order of acquittal, while if it has been made out on the offence charged, the court is bound to call upon the accused to enter on his defence. The test to be adopted in determining whether a prima facie case has been made out has been clearly enunciated inter alia, in the case of Looi Kow Chai & Anor v Public Prosecutor (2003) and Balachandran v Public Prosecutor (2005) where the Federal Court held that "... A prima facie case is therefore one that is sufficient for the accused to be called upon to answer. This in turn means that the evidence adduced must be such that it can be overthrown only by rebuttal evidence... The result is that the force of the evidence adduced must be such that if un-rebutted, it is sufficient to induce the court to believe in the existence of the facts as stated in the charge or to consider its existence so probable that a prudent man ought to act upon the supposition that those facts exist or did happen." It is trite law that the benefit of any doubt must be given to the accused (Chan King Yu v Public Prosecutor, 2009; Omar bin Shaari v Public Prosecutor 2014).

FINDINGS

This paper systematically searched two reliable sources of online legal journals in Malaysia: The Malayan Law Journal (MLJ) and the Current Law Journal (CLJ) which Universiti Kebangsaan Malaysia (UKM) subscribed. The purpose of the search is to find the number of reported cases in those journals where expert opinion of an entomologist is referred to in the courts of Malaysia. The keywords used were 'evidence', 'forensic', 'time of death' and 'entomologist'. From the word 'entomologists', there were 3 reported cases in CLJ namely: Teh Kim Hong & Ors v. PP (2014), In Re Inquest into the death of Teoh Beng Hock (2011) and PP lwn. Mat Saad Mat Isa & Ors & Other Cases (2004). The cases cited in MLJ were 2 but was actually the same case of Teh Kim Hong & Ors v. PP (2014). The results are as follows:

Keywords.				
Online Legal Journal	Keyword (Number of reported Malaysian cases)			
	Evidence	Forensic	Time of Death	Entomologist
MLJ	>3500	993	169	2
	(real number not			
	provided)			
CLJ	43288	991	567	3

 Table 1
 Number of reported Malaysian cases in online legal journals on the selected keywords.

Based on the above findings, it was observed that the number of reported cases where the word 'entomologist' was referred is scarce. This could be an indirect indication that forensic entomologist expertise was not given as much weight as those of a pathologist despite the fact that time of death is also crucial to prove a case. The importance of time of death can be seen in the case of Jitweer Singh a/l Ojagar Singh v Public Prosecutor (2016), which the Court of Appeal in Putrajaya held that 'the time of death of the deceased was inconsistent with the charge against the accused." The accused was then acquitted and discharged of the charge against him.

Assumptions as to why that only very few reported cases involving entomologist evidence are as stated herewith:

(i) The available search was only on reported cases and data of unreported cases are not made available; the assumption is that it may not reflect the true account of the cases heard in court where testimony of an entomologist was given. There could be more cases perhaps, if data of unreported cases is made available. Thus, the findings cannot be an indication that the opinion of an entomologist is not important.

(ii) Assumption that can be derived is that generally, only pathologist was called to testify in court based on the post mortem report prepared by him/her. If there were evidence provided by entomologist, it will usually be included in the post mortem report.

(iii) Another assumption that could be made is that due to the fact that in many cases, the time of death was not challenged in court or that the parties considered the testimony from a pathologist as adequate to support the evidence as it was all in the post mortem report prepared by him/her even when there was an opinion by an entomologist on the estimated time of death.

It is therefore suggested for future research that the best method to find the number of cases where entomologist is called to testify in court should be conducted by perusing through the physical court files for purpose of accuracy of the data and to answer all the above assumptions.

Case Studies

This is only a brief discussion of the cases, which were selected based on the above search of the reported cases in Malaysia made available by the online legal journals. The cases reflect those few limited cases in Malaysia which cited the evidence given by entomologist in court.

(i) Teh Kim Hong & Ors v. PP (2014)

In this case, there were 3 accused who were jointly charged for two offences, namely for murder under section 302 of the Penal Code and kidnapping under section 3 of the Kidnapping Act 1961.

The whole episode started with the disappearance of a young salesgirl, one Lai Yin Xin not long after she left her workplace on the 11.9.2008. On the 11.9.2008 at about 9.30 pm just after work, Lai Yin Xin was seen approaching and boarding a silver Perodua Kembara. She was on the date staying with her parents. Lai Then Song is her father and Chia Siew Peh is her mother. On the 12-9- 2008 at about 6.20 am the mother received a phone call from an unknown person claiming that Lai Yin Xin was in his custody and demanded ransom in the sum of RM60,000.00 in return of Lai Yin Xin's release. The police was later informed about the demand. Thereafter a series of calls reached the mother in relation to the demand for money. Finally, the caller agreed to accept

RM30,500.00. Khor Ting Loo, the boyfriend of Lai Yin Xin, then delivered the money at the specified location. The money was placed in a bag. On the caller's instructions the bag was later placed beside a road at Taman Indahpura Kulai. Lai Yin Xin was never returned.

On the 16-9-2008 at about 1.30 am, a police officer based on information, found a body which was totally burnt. Samples were taken from the area where the body was found and sent for forensic analysis. Clinical and forensic examinations by the pathologist, entomologist, odonatologist and chemist confirmed that the body was that of Lai Yin Xin.

In this case, it was observed that the entomologist has been called to testify along with the other experts. It is opined that this is a legally good practice. Where expert opinion is sought, the expert should be called to testify to state his/her opinion so as both parties would have a fair chance to question the reliability of the science. However, from the reported case, there was no elaboration on the evidence given.

(ii) In Re Inquest into the death of Teoh Beng Hock (2011)

The case was an inquest by the coroner under s. 337 of the CPC on a sudden death report. 'Teoh Beng Hock', the deceased, was found dead during custody of the Malaysian Anti-Corruption Commission (MACC) which had originated from the MACC premise.

Based on the legal journal report, some of the facts relevant for observation are: (i) the deceased (who was only said to be a potential witness by MACC) was taken to custody by the MACC officers; (ii) the deceased was interrogated at late hours of what we call as 'night and early hours of the morning'; (iii) the deceased was found dead on the 'extended verandah' of the 5th Floor having fallen from the 14th Floor; (iv) the dead body was sighted at about 1.40 pm, left lying on the spot and was only removed at 9.00 pm.

It was also noted that there were 12 expert witnesses in various scientific fields, who were called to assist in the inquest. They were:

- 1. Zaraiha binti Awang (SI-7) toxicologist;
- 2. Saiful Fazami bin Mohd Ali (SI-8) chemist in the Criminalistic Department;
- 3. Dr Seah Lay Hong (SI-9) DNA scientist;
- 4. Dr Khairul Azman bin Hj Ibrahim (SI-10) forensic pathologist;
- 5. Insp Zaidi bin Abu Hassan (SI-12) forensic analyst;
- 6. C Insp Mazli bin Jusoh (SI-13) fingerprint specialist;
- 7. Dr Prashant Naresh Samberkar (SI-15) forensic pathologist;
- 8. Dr Saravanan a/l Kanyappan (SI-26) forensic pathologist;
- 9. Dr Porntip Rojanusunan (SI-30) forensic pathologist;
- 10. Dr Shahidan Md Noor (SI-31) forensic pathologist;
- 11. Professor Dr Peter Vanezis (SI-32) forensic pathologist;
- 12. Wong Kong Yong (SI-37) handwriting expert.

The forensic evidence by the pathologists as reported are:

- Dr Khairul Azman bin Hj Ibrahim (SI-10) testified that he found rigor mortis on the body of TBH at 7.15pm on 16 July 2009 and believed that the deceased came by his death 6-8 hours before, which makes it between 11.15am till 1.15pm on 16 July 2009
- Dr Prashant Naresh Samberkar (SI-15) testified that he found rigor mortis on the body of TBH at 7.15pm on 16 July 2009 and believed that the deceased came by his death 8-12 hours before, which makes it between 7.15am till 11.15am on 16 July 2009
- Dr Porntip Rojanusunan (SI-3C) believed that TBH's time of death to be approximately 8-12 hours before 7.15pm on 16 July 2009 which makes it between 7.15am till 11.15am

It was observed that only the pathologists were called to testify in court even when there was forensic entomology evidence as to the time of death. The expertise of an entomologist is in actual fact, apparent and substantial to support the case.

Brief Notes:

(a) One interesting case though not listed in the above findings but of relevancy, is the case of Pendakwa Raya v Asni Omar (2014). In the case, forensic entomology was used to estimate the time of death of the victim, Stephanie Foray, a French citizen who went missing. She was later found dead and buried in a cave. In order to frame the charge and prove the case, estimation on the time of death is necessary.

The facts of the case were that a report that Stephanie Foray, a French citizen was missing, led to the arrest of the accused and the discoveries of, *inter alia*: (i) the place where the body of the deceased was buried i.e. in a cave at the back of the appellant's house; (ii) the place where the sling bag containing belongings of the deceased was buried in the cave; (iii) bags containing personal items of the deceased in the cupboard in the appellant's house; (iv) blood stains that had been wiped off on the wall of the living room in the appellant's house; and (v) a bottle of an alcoholic drink of Malibu brand believed to have been used as the murder weapon from a dumping ground. The post-mortem report by the prosecution's witness (presumably a pathologist as the word used in the case was that the person is a doctor from Tengku Ampuan Afzan Kuantan Forensic Department) showed four cracks on the skeletal of the deceased which according to the doctor was sufficient in the ordinary course of nature to cause death. The time of death was also incorporated in that report and estimation of the time of death was made based on that post mortem report which includes a forensic entomology analysis. It was not clear as to why the entomologist was not called to give evidence in court. Most likely due to the fact that it was not disputed during trial.

(b) In the case of Azwan bin Abd Rahaman v PP & Other Appeals (2018), the defence challenged evidence regarding 'the time of death'. The defence submitted that the evidence led by the prosecution does not prove the time of death of the deceased which according to the charge is stated to be at around 5.00 a.m. According to the defence, the pathologist had never given evidence as to the approximate time of the deceased's death.

These are cases to show that even when forensic entomology evidence is apparent, the entomologist was not called to testify in court.

SUGGESTIONS

It was observed that the usual practice in Malaysia is that a post mortem report will be prepared by a pathologist. Forensic entomology evidence to estimate the time of death will be incorporated in the said report. It is hereby suggested that forensic findings of a pathologist and entomologist should be distinguished and prepared separately. It is also suggested that proper recognition is given to the profession of entomologists in Malaysia. For example, in the case R v Serratore (2001) both parties in the case have their own appointed entomologist as the time of death was disputed and unable to be estimated by precision. Accordingly, entomologist should prepare a separate report to elaborate on his evidence regarding the time of death.

In terms of qualifications of an entomologist in Malaysia, the Allied Health Professions Act 2016 [Act 774] has been tabled and approved in Parliament but yet to come into force. The preamble of the Act says that it is "An Act to provide for the establishment of the Malaysian Allied Health Professions Council, to provide for the registration of persons practising as allied health practitioners and persons carrying on activities relating to allied health, to regulate the practice of Allied Health Professions, and for related matters." The Act shall apply to the Allied Health Professions as specified in the Second Schedule which includes entomologists.

It is suggested that for future research, the best method should be by accessing the physical file of the courts so that a clearer picture is made available to assess the number of cases where entomologists are called to testify in court.

ACKNOWLEDGMENTS

This research was supported by UKM research grant GGPM-2017-078.

REFERENCES

- Anderson, G.S. 2001. Forensic entomology in British Columbia: A brief history, School of Criminology, Simon Fraser University, 8888 University Drive, Burnaby, Canada.file:///C:/Users/Prof%20Idris/Downloads/557-976-1-PB.pdf [1 June2018]
- Anderson, G.S. 2018. Forensic entomology: the use of insects in death investigations, http://www.sfu.ca/~ganderso/forensicentomology.htm#_ftnref1 [30 May 2018)]
- Azwan bin Abd Rahaman v Pendakwa Raya & Rayuan-Rayuan Lain [2018] MLJU 395, Malayan Law Journal.
- Balachandran v Public Prosecutor [2005] 2 MLJ 301, Malayan Law Journal.
- Byrd, J.H. & Castner, J.L. 2009. *Forensic Entomology: The Utility of Arthropods in Legal Investigations*. 2nd ed. Boca Raton: CRC Press, Taylor and Francis Group.
- Chan King Yu v Public Prosecutor [2009] 1 MLJ 457; [2009] 1 CLJ 601, Current Law Journal.
- *Graham Stuart Stafford v R BC200911705* [2008] QCA 407 [Supreme Court of Queensland Court of Appeal]
- Henry C. Lee. 1993. Forensic Science and The Law, Connecticut Law Review, 25 Conn. L. Rev. 1117
- Looi Kow Chai & Anor v Public Prosecutor [2003] 2 MLJ 65, Malayan Law Journal.
- Hall, M. & Brandt, A. 2006. Forensic entomology. Science in School (Summer) 2: 49-53. https://www.scienceinschool.org/sites/default/files/teaserPdf/issue2_forensic.pdf [30 May 2018]
- Hall, R.D. 2010. *The Forensic Entomologist as Expert Witness*. http://www.esf.edu/efb/parry/Expert_Testimony.pdf [30 May 2018].
- Nor Aliza Abdul Rahim. 2017. Forensic Entomology and The Relevance Of MLT Contributions. http://mimls.org/uploads/bsm2017/Nor%20AlizaAbdul%20Rahim%220Forensic%20 entomology%20and%20the%20relevance.pdf [30 May 2018]

Omar bin Shaari v Public Prosecutor [2014] 2 MLJ 586, Malayan Law Journal.

Pendakwa Raya v Asni Omar [2014] 1 LNS 1730, Legal Network Series.

Public Prosecutor v Jitweer Singh a/l Ojagar Singh [2014] 6 MLJ 222.

R. v. Yashnev [1994] O.J. No. 2472, 25 W.C.B. (2d) 357 (Ontario Court of Justice - Provincial Division)

Raja Muhammad Zuha Raja Kamal Bashah & Ramalinggam Rajamanickam. 2017. Entomologi Forensik sebagai Keterangan Saintifik. The Law Review [2017] 1 LR 36. *The Law Review* 36-45.

Teoh Meng Kee v Public Prosecutor [2014] 5 MLJ 741, Malayan Law Journal.