



**USM** UNIVERSITI  
SAINS  
MALAYSIA



# Short Term Programme Centre for Herbal Standardization

Universiti Sains Malaysia

Back to the roots through your  
1- stop multicultural herbal hub





## **Centre for Herbal Standardization (CHEST) Universiti Sains Malaysia**

Herbal products are gaining increasing importance and general acceptability across the globe either as nutritional supplements, medicines or essential ingredients in cosmeceuticals. It is often claimed that indigenous traditional knowledge of know-how skills and practices toward herbal plants are not always aligned with modern drug development. Understanding the need to bridge this gap, Universiti Sains Malaysia in a joint effort with Biotropics Malaysia Berhad established the Centre for Herbal Standardization (CHEST) in the year of 2011.

CHEST is driven by its underlying motto, "Inspired by Nature, Driven by Expertise", is the leading centre in USM offering state-of-the-art herbal research facilities that confer excellent solutions and valuable benefits to various corporate as well as government sectors.

CHEST provides best-in-class platform for herbal standardization where the practise of good quality assurance lead to the development of herbal products which are of high quality, safety and efficacy.





## Programme Overview

This program is intentionally designed to bring everyone back to the roots through inspiring exploration of Malaysia's multicultural herbal plants. The lectures address traditional perspectives, herbal medicine practices, bioactivity research and quality assurance/quality control of Asian herbs. This course furnishes significant width of Asian herbal perception through theoretical knowledge, practical guidance, on-site experiential and traditional learning. Laboratory and field-trip sessions are designed to provide practical skills-training as well as enabling students to appreciate the exquisiteness of Malaysian herbal plants.

Throughout this programme, students get to uncover the unique cultural and ethnic diversity of Malaysia and their rich traditional medicine systems. The students will enjoy the opportunity to explore various local botanical, herb and spice gardens where indigenous and exotic herbal plants are nurtured. A certificate of participation will be awarded by the Centre for Herbal Standardization, Universiti Sains Malaysia to all the students whom had successfully accomplished this programme.



## Programme Objectives

Upon completion of this programme, student will learn and understand:

- 1. Foundation of Malaysia's multicultural medicinal herbals and its historical uses.
- 2. The theories, practices and current research on therapeutic uses of the Asian herbs.
- 3. Quality assurance/quality control of herbal plants through standardization.





Speaker	Topic	Synopsis
 <p data-bbox="138 566 315 598">Ms. Rosliza Ahmad</p>	<p data-bbox="378 391 592 438">Healing Power of Malay Traditional Herbs</p>	<p data-bbox="642 287 1121 654">Medicinal herbs have always maintained their popularity for proven efficacy as well as for historical and cultural reasons. Since immemorial, variety of traditional herbs has been exploited by the Malays as an alternative treatment to various ailments. In Malaysia, the tropical rain forests proudly own an armamentarium of herbal plants with potential medicinal values. These herbal plants are not only used for healing purposes but also as a preventative action to boost immune function and to promote general well being. Essentially, almost all parts of the herbal plant are fully utilized for the medicinal and health improvement purpose. This lecture will identify selected examples of the famous local herbal plants and highlight their medicinal value based on past research and local traditional knowledge</p>
 <p data-bbox="138 949 315 997">Mr. Mohd. Khairul Nizam Mazlan</p>	<p data-bbox="365 742 604 813">From Bench to Book: Development of Malaysian Herbal Monograph</p>	<p data-bbox="642 694 1121 1013">Medicinal herbs necessitate proper scientific studies and records albeit the traditional use over the years should not be disregarded. Herbal monograph represents a public standard which provides substantial information about the identity of the herb and the tests needed to ensure the consistency, uniformity, and quality of the herbal plant and its chemical substances. This document records important criteria that affirm safety and efficacy of a herbal based product. Herbal monograph goes through an open and transparent development process until a final version is published. Depiction on the various laboratory phases involved in the development of Malaysian herbal monograph will be the focus of this lecture.</p>
 <p data-bbox="138 1364 315 1396">Mr. Teh Eng Huat</p>	<p data-bbox="359 1165 604 1236">Quality Control of Malaysian Herbal Through Standardization</p>	<p data-bbox="642 1077 1121 1460">Herbal products are gaining increasing importance and general acceptability in Malaysia as nutritional supplements, medicines or as essential ingredients in cosmeceuticals. This popularity is the result of the recognition of the unique biochemistry and therapeutic potential of the herbs as well as acceptance of Malaysian government to promote local herbal products globally under the National Key Economic Areas (NKEAs). Unfortunately, the escalating use of herbal product has also given rise to the abuse and adulteration of the herbal substances. Standardization of the herbal material is therefore of upmost importance to ensure reproducibility in the manufacturing of herbal products. This lecture addresses the importance of standardization and the practice of good quality assurance in the development of herbal products which are of high quality, safety and efficacy.</p>















Speaker	Topic	Synopsis
 <p data-bbox="148 580 317 624">Dr. Shanmugapriya Perumal</p>	<p data-bbox="379 384 597 427">Nutritional Indian Herbal Plants</p>	<p data-bbox="650 285 1122 624">Today, plants form the basis of modern medicine and contribute largely to the commercial drug preparations. About 25% of drugs prescribed worldwide are derived from plants. Indian medicinal plants are the essence of Ayurvedic treatments. The importance of the medicinal plants has been well documented by Indian scholars since ancient period and used throughout human history. Many herbal plants and spices used in Indian dietary are known to have medicinal properties. These herbal plants have always been part of the staple diet recommended by Ayurvedic physicians to cure diseases and to keep them at bay. This lecture reviews a list of Indian herbal plants used in every individual's healthy diet and its nutritional benefits for health promotion and treatment of disease.</p>
 <p data-bbox="148 971 294 1015">Prof. Dr. Sabariah Ismail</p>	<p data-bbox="395 740 568 783">Malaysian Herbs for Healthier You</p>	<p data-bbox="650 692 1122 1007">Proper diet and lifestyle promote balance and lead to a long, healthy life. Malaysia is rich with variety of traditional foods composed mainly of flavourful fresh herbs. Malay communities are well known for their practices of using raw herbal plants and spices in their daily dish. However understanding factors such as appropriate herbal combining and preparation is essential in Malay traditional cuisine. The lecture is designed to teach how to make proper herbal dietary choices that bring vibrant health to the entire body. Through lecture and hands-on demonstrations, students will learn how to prepare and share a delicious as well as healthiest Malay traditional meal known as 'ulam' as a group using fresh local herbs and spices.</p>
 <p data-bbox="139 1370 312 1414">Dr. Norliyana Mohd. Salleh</p>	<p data-bbox="370 1166 599 1209">Into the Mood with Herbal Aromatherapy</p>	<p data-bbox="650 1099 1122 1453">Aromatic herbs have been vastly employed for therapeutic uses throughout recorded history in both the East and West. Malaysia is none other than a magnificent tropical country with abundant aromatic herbal plants. Aromatherapy is famous all over the country as an alluring alternative medicine and often used by inhalation or topical application of essential oils or the pure essence distilled from the aromatic herbs. Aromatherapy is intended to improve mood as well as change cognitive states by enhancing physical, mental, emotional and spiritual well-being. The lecture will expose students to the chemistry inside the pure essence from aromatic plants and their effect to human psychology. Through demonstration, the students will learn to make aromatherapy candles using local herbs as a group.</p>



Speaker	Topic	Synopsis
 <p data-bbox="132 566 327 614">Assoc. Prof. Dr. Roziahanim Mahmud</p>	<p data-bbox="359 383 611 406">Medicinal Herbs of Malaysia</p>	<p data-bbox="642 279 1127 622">Majority of the population in developing countries depend on traditional medicine for their primary health care. Herbal medicines are used for traditional reasons to protect, restore, or improve health. Herbal plants are rich in a variety of secondary metabolites. Many of these compounds have pronounced pharmacological properties. Plant constituents are used directly as therapeutic agents, as starting materials for the synthesis of drugs or as models for pharmacologically active compounds. The lecture present a scientific overview of the pharmacological activities and therapeutic potential of Asian medicinal plants. The students will experience the local tradition of applying 'inaí' (Lawsonia inermis) on hands known for its proven medicinal purposes.</p>
 <p data-bbox="144 973 296 997">Dr. Yam Mun Fei</p>	<p data-bbox="352 742 617 805">Acupuncture Meridian System: Traditional Chinese Therapeutic Intervention</p>	<p data-bbox="642 662 1127 1029">Traditional Chinese medicine is one of the oldest continuous systems of medicine in history. It encompasses several methods designed to help patients achieve and maintain high-quality health. Acupuncture is the most often practiced component of traditional Chinese medicine that have been developed and exercised not only in Asia, but world-wide. Acupuncture has been broadly used to treat or cure a wide range of ailments. This treatment involves the insertion of thin needles into the skin at specific acupuncture points and often associated with the application of heat and pressure to the same points. The lecture provide insights on advantages and therapeutic effects of traditional acupuncture treatment as well it's future prospects as a robust alternative medicine</p>
 <p data-bbox="144 1364 296 1412">Prof. Dr. Sabariah Ismail</p>	<p data-bbox="384 1157 573 1181">Herb-drug Interaction</p>	<p data-bbox="642 1069 1127 1452">Increase in the usage of herbal products as therapeutic agents is often accompanied with an increased prevalence of concomitant consumption of herbs together with conventional medicines. Many herb-drug interactions are attributed to altered drug metabolizing enzyme activities when the herbal constituents alter the activity and of drug metabolizing enzymes (DMEs). When herbs alter the activity and/or expression of DMEs, the bioavailability, clearance and kinetic parameters of co-administered drugs can thus be modified. These effects may eventually lead to changes in toxicity and clinical efficacy of the co-administered drugs. This lecture will discuss the importance of having the knowledge on the potential of herbal medicines to inhibit (when co-administered) and/or induce (after repeated administration) drug metabolizing enzyme activities.</p>



# Proposed schedule

Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Monday
						-Arrival
 Orientation -Ice breaking -Campus tour	 -Lecture 1 -Lecture 2 -Culture 1	 Fieldtrip 1: (HERBAGUS) -Fieldwork 1	 Lecture 3 -Lecture 4 -Lecture 5	 Lecture 6 -Lecture 7 -Culture 2	 Lecture 8 -Field trip 2: (Tropical Spice Garden)	 Homestay/ Team Building Programme
 Homestay/ team building programme	 Final Presentation -Depart to Langkawi	 Visit 1 Langkawi (Nusantara Gamat Factory)	 Visit 2 Langkawi	 Visit 3 Langkawi (Agro Park) Return to Penang	Depart home	

- 01 LECTURE
- 02 LECTURE
- 03 LECTURE
- 04 LECTURE
- 05 LECTURE
- 06 LECTURE
- 07 LECTURE
- 08 LECTURE

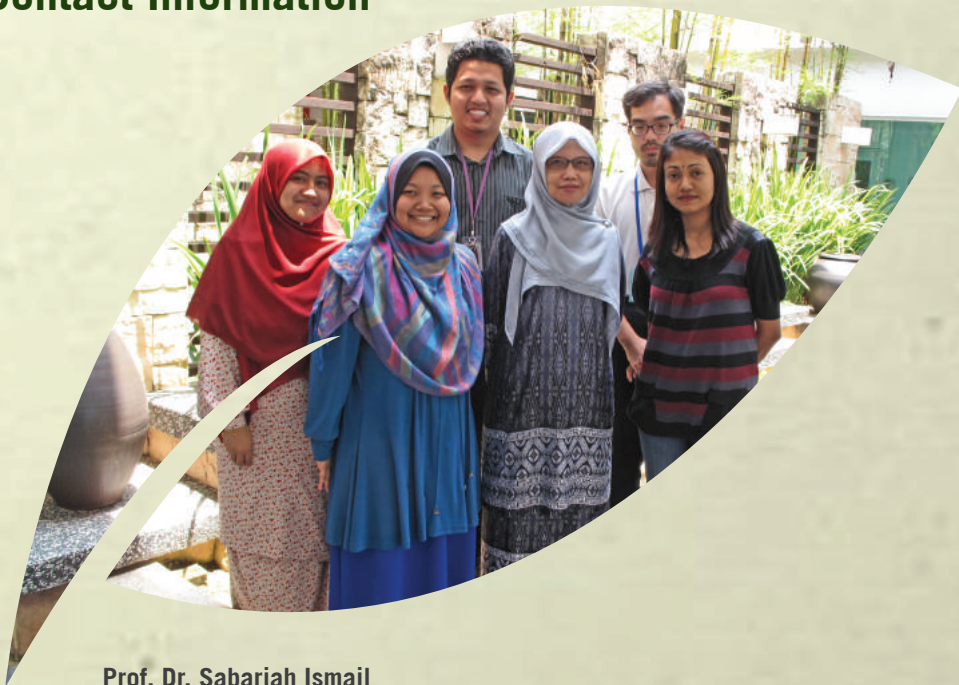
 Programme conducted in Penang

 Programme conducted in Langkawi





## Contact Information



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