

#### ANNAI JKK SAMPOORANI AMMAL COLLEGE OF PHARMACY

Ethirmedu, B.Komarapalayam – 638 183, Namakkal Dist. Tamilnadu. India Approved by: Pharmacy Council of India, New Delhi & The TamilnaduDr.M.G.R Medical University, Chennai. Website: <a href="www.jkkmmrfpharmacy.edu.in/E-Mail">www.jkkmmrfpharmacy.edu.in/E-Mail</a>: <a href="mailto:principal@jkkmmrfpharmacy.edu.in">principal@jkkmmrfpharmacy.edu.in</a>
Contact No.: +919789456750, +919943069944, +919943066944

#### REPORT

#### Seminar on Current Scenario of Herbal Antioxidants

#### **RESOURCE PERSONS**

Dr. N. Balakrishnan M.Pharm., Ph.D

Dr. R.Arivukarasu., M.Pharm., Ph.D

S.A. Raja College of Pharmacy, Vadakankulam

KMCH College of Pharmacy, Coimbatore

No. of students enrolled: 305

No. of students certified: 305

No.students certified in our Institution: 36

On June.07.2018, the Department of Pharmacognosy at JKKMMRF'sSampoorni Ammal College of Pharmacy held a seminar on Current Scenario of Herbal Antioxidants in the Seminar hall. The seminar was attended by 305 students and was certified by the college.

The seminar began with an introduction to Current Scenario of Herbal Antioxidants and its importance in research studies. The speaker discussed important health effects, the efficient extraction methods of natural antioxidants, appropriate assessment of antioxidant activity as well as their main resources from food and medicinal plants are drawing great attention in food science and nutrition.

The speaker also covered the important health effects, the efficient extraction methods of natural antioxidants, appropriate assessment of antioxidant activity as well as their main resources from food and medicinal plants are drawing great attention in food science and nutrition.

The students participated actively in the seminar, asking questions and engaging in discussions and received feedback from the speaker.

Overall, the seminar was well-received by the students and provided them with valuable knowledge and skills in enforcement of IP rights. The Department of Pharmacognosy at JKKMMRF's Sampoorani Ammal College of Pharmacy is committed to providing high-quality education and training to its students and plans to hold similar seminars in the future.

Programme Co-ordinator

HOD

Principal

Dr. N.SENTHILKUMAR, PRINCIPAL

JKK MUNIRAJAH MEDICAL RESEARCH FOUNDATION ANNAI JKK SAMPOORANI AMMAL COLLEGE OF PHARMACY ETHIRMEDU, KOMARAPALAYAM - 638 183. NAMAKKAL DISTRICT, TAMILNADU, INDIA.

Dr. N.SENTHICHUI

PRINCIPAL



### ANNAI JKK SAMPOORANI AMMAL COLLEGE OF PHARMACY

Ethirmedu, **B.Komarapalayam** — 638-183, Namakkal Dist. Tamilnadu. India Approved by: Pharmacy Council of India, New Delhi & The TamilnaduDr.M.G.R Medical University, Chennai. Website: <a href="www.jkkmmrfpharmacy.edu.in">www.jkkmmrfpharmacy.edu.in</a> | E-Mail: <a href="mailto:principal@jkkmmrfpharmacy.edu.in">principal@jkkmmrfpharmacy.edu.in</a> | Contact No.: +919789456750, +919943069944, +919943066944

REF.NO: JKKM/PH-COGNOSY /REQ/2020/007

Date: 04.06.2018

#### From

Department of Pharmacognosy,

JKKMMRF'S Annai JKK Sampoorani Ammal College of Pharmacy,

Komarapalayam, Namakkal [Dist],

Tamil Nadu, PIN: 638183.

To

The Principal,

JKKMMRF'S Annai JKK Sampoorani Ammal College of Pharmacy,

Komarapalayam, Namakkal [Dist],

Tamil Nadu, PIN:638183.

#### Respected Sir,

Subject: Requesting Permission to conduct Seminar -regarding.

With due respect, we humbly request you to grand permission to conduct a Seminar in the Seminar Hall during 7/6/2018 on Current scenario of Herbal Antioxidants. It will be a very informative course for our students.

Kindly do the needful. We will be grateful to you sir.

Thank you

Yours sincerely,

Dr. N. SENTHILKUMAR,





## J.K.K.MUNIRAJAH MEDICAL RESEARCH FOUNDATION'S ANNAI JKK SAMPOORANI AMMAL COLLEGE OF PHARMACY

Ethirmedu, **B.Komarapalayam** – 638 183, Namakkal Dist. Tamilnadu. India Approved by: Pharmacy Council of India, New Delhi & The TamilnaduDr.M.G.R Medical University, Chennai. Website: <a href="https://www.jkkmmrfpharmacy.edu.in">www.jkkmmrfpharmacy.edu.in</a> E-Mail: <a href="mailto:principal@jkkmmrfpharmacy.edu.in">principal@jkkmmrfpharmacy.edu.in</a>

Contact No.: +919789456750, +919943069944, +919943066944

#### **DEPARTMENT OF PHARMACOGNOSY**

2018-2019

CIRCULAR

This is inform to the Students that the following Seminar program can be conducted by the Department of Pharmacognosy, JKKMMRF's ANNAI JKK SAMPOORANI AMMAL COLLEGE OF PHARMACY and it will be commenced as per the schedule:

| Course Name                              | Schedule | Venue           | Resource Person                                 |
|--|----------|-----------------|---|
| Current scenario of Herbal  Antioxidants | 7/6/2018 | SEMINAR<br>HALL | Dr. V.R. Ravikumar<br>&<br>Dr. N. Balakrishnan, |
|  |          |                 |   |

All the above mentioned students must enrol and actively participate in the course without fail.

NOTE: Certificates should be issued to all the students after completion of the course and examination.

PRINCIPAL

Dr. N. SENTHILKUMAR, PRINCIPAL,

JKK MUNIRAJAH MEDICAL RESEARCH FOUNDATION ANNAI JKK SAMPOORANI AMMAL COLLEGE OF PHARMACY, ETHIRMEDU, KOMARAPALAYAM - 638 183. NAMAKKAL DISTRICT, TAMILNADU.

Dr. N.SENTHILKUMAR,

\*PRINCIPAL



## JKKMMRF'S ANNAI JKK SAMPOORANI AMMAL COLLEGE OF PHARMACY, KOMARAPALAYAM SEMINAR ON



Current scenerio of Herbal Antioxidants

Organised by

Department of Pharmacognosy

### RESOURCE PERSONS



Dr. N.Balakrinshan
Principal
S.A. Raja Colege of Pharmacy,
Vadakankulam.

Dr. R. Arivukarasu., M.Pharm., Ph.D Profesor and Head Department of Pharmacognosy KMCH College of Pharmacy

Organising secretary Dr.P.Satheesh Kumar

Co-Convenor Dr.E. Thilagam



Convenor Dr.N. Senthil Kumar

VENUE: SEMINAR HALL (07/06/2018)

> Dr. N. SENTHILKUMAR, PRINCIPAL,





### ANNAI JKK SAMPOORANI AMMAL COLLEGE OF PHARMACY

Ethirmedu, **B.Komarapalayam** — 638-183, Namakkal Dist. Tamilnadu. India Approved by: Pharmacy Council of India, New Delhi & The TamilnaduDr.M.G.R Medical University, Chennai. Website: <a href="www.jkkmmrfpharmacy.edu.in">www.jkkmmrfpharmacy.edu.in</a> | E-Mail: <a href="principal@jkkmmrfpharmacy.edu.in">principal@jkkmmrfpharmacy.edu.in</a> | Contact No.: +919789456750, +919943069944, +919943066944

#### **ABOUT THE COURSE**

Natural antioxidants are widely distributed in food and medicinal plants. These natural antioxidants, especially polyphenols and carotenoids, exhibit a wide range of biological effects, including anti-inflammatory, anti-aging, anti-atherosclerosis and anticancer. The effective extraction and proper assessment of antioxidants from food and medicinal plants are crucial to explore the potential antioxidant sources and promote the application in functional foods, pharmaceuticals and food assessment of antioxidant activity at chemical and cellular based levels and their main resources from food and medicinal plants.

Considering their important health effects, the efficient extraction methods of natural antioxidants, appropriate assessment of antioxidant activity as well as their main resources from food and medicinal plants are drawing great attention in food science and nutrition. To improve the extraction efficiency of antioxidant components from plant materials, several green non-conventional methods have been developed for reducing operational time and usage of organic solvents, such as ultrasound-assisted extraction, microwave-assisted extraction, enzyme-assisted extraction, pressurized liquid extraction, supercritical fluid extraction, high hydrostatic pressure extraction, pulsed electric field extraction and high voltage electrical discharges extraction. Moreover, to further assess the antioxidant capacities of extracts from natural products, especially those frequently consumed by people, different evaluation assays have been developed, e.g., Trolox equivalence antioxidant capacity (TEAC) assay, ferric ion reducing antioxidant power (FRAP) assay, oxygen radical absorbance capacity (ORAC) assay, inhibiting the oxidation of low-density lipoprotein (LDL) assay, cellular antioxidant activity assay, etc. These assays have been used for ranking the antioxidant plants and recommending best antioxidant foods for consumption. This review is aimed at maining the extraction methods of natural antioxidants, assessment methods of antioxidant activity and their main resources from food and medicinal plants.

Enzymes have the properties of high specificity and high efficiency. Enzyme-assisted extraction (EAE) is a potential green extraction method because of the mild extraction conditions and barely any effect on the environment. The enzymes could degrade the compositions and destroy the structural integrity of plant cell wall, which enhance the release of bioactive compounds.

Antioxidants derived from food and medicinal plants have been increasingly investigated for their various nutritional function and health benefits. In this review, the extraction methods of natural antioxidants, assessment methods of antioxidant activity as well as their main resources from food and medicinal plants are summarized. The non-conventional techniques described have potential to replace or enhance existing extraction techniques due to the less extraction time, energy consumption, and usage of harmful organic solvents, as well as higher extraction yields to recover antioxidant compounds from food.

Dr. N. SENTHILKUMAR, PRINCIPAL,



## ANNAI JKK SAMPOORANI AMMAL COLLEGE OF PHARMACY

Ethirmedu, **B.Komarapalayam** – 638 183, Namakkal Dist. Tamilnadu. India Approved by: Pharmacy Council of India, New Delhi & The TamilnaduDr.M.G.R Medical University, Chennai. Website: <a href="www.jkkmmrfpharmacy.edu.in">www.jkkmmrfpharmacy.edu.in</a> E-Mail: <a href="principal@jkkmmrfpharmacy.edu.in">principal@jkkmmrfpharmacy.edu.in</a> Contact No.: +919789456750, +919943069944, +919943066944

#### Seminar on

| Current Scenario of Herbal Antioxidants  |   |  |  |  |
|--|---|--|--|--|
| STUDENT FEEDBACK FORM  |   |  |  |  |
| NAME OF STUDENT:<br>COURSE :   | REGISTRATION NO:<br>YEAR & SEMESTER:  |  |  |  |
| SEMINAR TOPIC :  | DATE & TIME:  |  |  |  |
| <ol> <li>Overall, how satisfied were you with this seminar?</li> <li>Very satisfied</li> <li>Satisfied</li> <li>Neutral</li> <li>Dissatisfied</li> <li>Very dissatisfied</li> </ol>  |   |  |  |  |
| <ul> <li>2. How clear were the ideas and concepts we presented</li> <li>Extremely clear</li> <li>Very clear</li> <li>Moderately clear</li> <li>Not very clear</li> <li>Not at all clear</li> <li>What percentage of the information was new to you?</li> </ul> | ?   |  |  |  |
| 100% 75% 50% 25% 0%  | - Common of the |  |  |  |
| 4. How informative did you find our seminar?  Extremely Informative  Very Informative  Moderately Informative  | Dr. N. SENTHILKUMAR, PRINCIPAL, JKK MUNIRAJAH MEDICAL RESEARCH FOUNDATION ANNAI JKK SAMPOORANI AMMAL COLLEGE OF PHARMACY, ETHIRMEDU, KOMARAPALAYAM - 638 183. NAMAKKAL DISTRICT, TAMILNADU.   |  |  |  |

|          | Not very informative   |
|----------|--|
| 5.       | Not informative at all  Were there any technical issues that prevented you from seeing or hearing the seminar? |
| ,        |  |
| <i>C</i> | Yes  |
| (        | No   |
| 6.       | Would you like to learn more about this topic?   |
| -        | Yes  |
| (        | No   |
| 7.       | Rate the content of the slides/virtual aid?  |
| (        | Extremely clear  |
| ~        | Very clear   |
| (        | Moderately clear   |
| (        | Not very clear   |
|          | Not at all clear   |
| 8.       | How accurate was the session description?  |
| -        | Extremely clear  |
| (        | Very clear   |
| -        | Moderately clear   |
| -        | Not very clear   |
|          |  |
| 9.       | How did the session compare to your expectations?  |
| (        | Excellent  |
| ~        | Good   |
| (        | Fair   |
| (        | Poor   |
| 40       | Not at all clear   |
| 10.      | How Would you rate the content of the seminar?   |
| ~        | 1  |
| -        | 2  |
| _        | 3  |
| -        | 4  |
|          | 5  |
|          | Student Name with Signature  |
|          |  |

Dr. N. SENTHILKUMAR,
PRINCIPAL,

JKK MUNIRAJAH MEDICAL RESEARCH FOUNDATION
ANNAI JKK SAMPOORANI AMMAL COLLEGE OF PHARMACY,
ETHIRMEDU, KOMARAPALAYAM - 638 183.

NAMAKKAL DISTRICT, TAMILNADU.



### ANNAI JKK SAMPOORANI AMMAL COLLEGE OF PHARMACY

Ethirmedu, **B.Komarapalayam** – 638 183, Namakkal Dist, Tamilnadu, India Approved by: Pharmacy Council of India, New Delhi & The TamilnaduDr.M.G.R Medical University, Chennai, Website: <a href="www.jkkmmrfpharmacy.edu.in">www.jkkmmrfpharmacy.edu.in</a> E-Mail: <a href="mailto:principal@jkkmmrfpharmacy.edu.in">principal@jkkmmrfpharmacy.edu.in</a> Contact No.: +919789456750, +919943069944, +919943066944

#### Seminar on

## **Current Scenario of Herbal Antioxidants STUDENTS FEEDBACK ANALYSIS**

DATE: 7/6/2018

| S.NO | QUESTION DESCRIPTION                  | <b>ANSWERS</b>       | MARKS | TOTAL MARKS     |
|------|---------------------------------------|----------------------|-------|-----------------|
|      |                                       | Very satisfied       | 5     |                 |
|      |                                       | Satisfied            | 3     |                 |
| 1    | Satisfaction                          | Neutral              | 2     | 5               |
|      |                                       | Dissatisfied         | 1     |                 |
|      |                                       | Very dissatisfied    | 0     |                 |
|      | Clarity                               | Extremely clear      | 5     |                 |
|      |                                       | Very clear           | 4     |                 |
| 2    |                                       | Moderately clear     | 2     | 5               |
|      |                                       | Not very clear       | 1     |                 |
|      |                                       | Not at all clear     | 0     |                 |
|      |                                       | 100%                 | 5     |                 |
|      | Percentage of the information was new | 75%                  | 4     |                 |
| 3    |                                       | 50%                  | 3     | 5               |
| 3 1  |                                       | 25%                  | 2     |                 |
|      |                                       | 0%                   | 1     |                 |
|      |                                       | remely Informative   | 5     |                 |
| 4    | Imormative                            | Very Informative     | 3     |                 |
|      |                                       | erately Informative  | 2     | 5               |
|      |                                       | ot very informative  | 1     |                 |
|      |                                       | t informative at all | 0     |                 |
|      |                                       | Yes                  | 5     | 5               |
| 5    | Technical issues                      | No                   | 0     | N An            |
| -    | Like to learn more about this topic   | Yes                  | Dr. N | SENTHILKUMAR, 5 |
| 6    | Like to learn more about the topic    | No                   | 0     | PRINCIPAL.      |

|    | 5      | Extremely clear  |   |            |
|----|--------|------------------|---|------------|
|    | 3      | Very clear       |   |            |
| 5_ | 2      | Moderately clear | ate the content of the slides/virtual aid | 7- late th |
|    | 1      | Not very clear   |   |            |
|    | 0      | Not at all clear |   |            |
|    | 5      | Extremely clear  |   |            |
|    | 3      | Very clear       |   |            |
| 5  | 2      | Moderately clear | Accuracy of the sessions                  | 8          |
|    | 1      | Not very clear   |   |            |
|    | 0      | Not at all clear |   |            |
|    | 5      | Excellent        |   |            |
|    | 3      | Good             |   |            |
| 5  | 2      | Fair             | Session expectations                      | 9          |
|    | Poor 1 | Poor             | •   |            |
|    | 0      | Not at all clear |   |            |
|    | 1      | 1                |   |            |
|    | 2      | 2                |   |            |
| 5  | 3      | 3                | Rate the content of the seminar           | 10         |
|    | 4      | 4                |   |            |
|    | 5      | 5                |   |            |

Total marks = 50

Head of the Department

The chical Result of County of Count

Principal

Dr. N. SENTHILKUMAR, PRINCIPAL,



# J.K.K.MUNIRAJAH MEDICAL RESEARCH FOUNDATION'S ANNAI JKK SAMPOORANI AMMAL COLLEGE OF PHARMACY

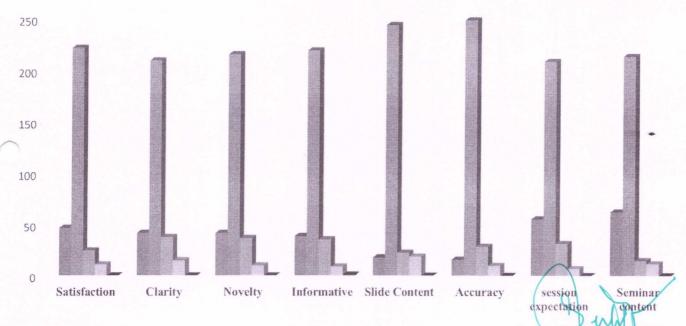
Ethirmedu, **B.Komarapalayam** – 638 183, Namakkal Dist. Tamilnadu. India Approved by: Pharmacy Council of India, New Delhi & The TamilnaduDr.M.G.R Medical University, Chennai. Website: <a href="www.jkkmmrfpharmacy.edu.in">www.jkkmmrfpharmacy.edu.in</a> [E-Mail: principal@jkkmmrfpharmacy.edu.in Contact No.: +919789456750, +919943069944, +919943066944

#### Seminar on

## Current Scenario of Herbal Antioxidants REPORT SUMMARY

DATE: 7/6/2018

| 1.Satisfaction                           | 6.Like to learn more about this topic        |  |
|--|--|--|
| 2.Clarity                                | 7.Rate the content of the slides/virtual aid |  |
| 3. Percentage of the information was new | 8.Accuracy of the sessions                   |  |
| 4.Informative                            | 9.Session expectations                       |  |
| 5.Technical issues                       | 10.Rate the content of the seminar           |  |



■ Excellent ■ Good ■ Fair ■ Poor ■ Not clear

Dr. N. SENTHILKUMAR, PRINCIPAL,





#### ANNAI JKK SAMPOORANI AMMAL COLLEGE OF PHARMACY

Ethirmedu, **B.Komarapalayam** – 638-183, Namakkal Dist, Tamilnadu, India Approved by : Pharmacy Council of India, New Delhi & The TamilnaduDr.M.G.R Medical University, Chennai. Website: <a href="https://www.jkkmmrfpharmacy.edu.in">www.jkkmmrfpharmacy.edu.in</a> [E-Mail: principal@jkkmmrfpharmacy.edu.in

Contact No.: +919789456750, +919943069944, +919943066944

#### LIST OF PARTICIPANTS

| 1  | SRIRANGANATHAN RADHAKRISHNAN | II YR    |
|----|------------------------------|----------|
| 2  | SUDHAKARK                    | II YR    |
| 3  | SURYAS                       | II YR    |
| 4  | SYED ASIF A                  | ILYR     |
| 5  | SYED MOHAMED S               | II YR    |
| 6  | TAMILARASAN M                | II YR    |
| 7  | TAMILARASU A                 | II YR    |
| 8  | VANITHA M                    | II YR    |
| 9  | VENKATESHS                   | II YR    |
| 10 | VENUGOPALR                   | II YR    |
| 11 | VIGNESH B                    | II YR    |
| 12 | VIGNESHR                     | II YR    |
| 13 | VIJAY V                      | II YR    |
| 14 | VISHNU M S                   | II YR    |
| 15 | VISHNU PRIYA S               | II YR    |
| 16 | VIVEKM                       | II YR    |
| 17 | YAZHLMOZHLIS                 | II YR    |
| 18 | KARTHIKEYANR                 | - II YR  |
| 19 | MOHAMEDASIF A                | II YR    |
| 20 | PRIYADEVIB                   | II YR    |
| 21 | VIJAYAPRADHA K               | II YR    |
| 22 | ALSIYA.S                     | III YR   |
| 23 | ANUSIY A.A                   | III YR   |
| 24 | ARUN.K.C                     | III YR   |
| 25 | ASHOKKUMAR.A                 | III YR   |
| 26 | BHUVANESHWARAN.B             | III YR   |
| 27 | DEEPIKA.V                    | III YR   |
| 28 | DINESH.M                     | III YR   |
| 29 | DINESHKUMAR.M                | - III YR |
| 30 | EZHUMALAI.E                  | III YR   |
| 31 | GAYATHRI.M                   | III-YR   |
| 32 | GAYATHRI.S                   | III YR   |
| 33 | GEETHAMALAR.R                | III YR   |
| 34 | GOKULAVASAN.S                | III YR   |
| 35 | GOVINDARAJ.M                 | III YR   |
| 36 | JANARTHANAN.K                | III YR   |



Dr. N. SENTHILKUMAR, PRINCIPAL,



## JKKMMRF'S ANNAI JKK SAMPOORANI AMMAL COLLEGE OF PHARMACY. KOMARAPALAYAM



Seminar on

Current Scenario of Herbal Antioxidants

Organised by
Department of Pharmacognosy

CERTIFICATE OF PARTICIPATION

This is to certify that Ms./ Mr./ Mrs./ Dr.

has Delegate/Resource person in seminar on Current Scenario of Herbal Antioxidants

held on 07.06.2018.

Dilgatoli8
Co-Convenor

Convenor

Dr. N. SENTHILKUMAR, PRINCIPAL,





# JKKMMRF'S ANNAI JKK SAMPOORANI AMMAL COLLEGE OF PHARMACY. KOMARAPALAYAM



Seminar on

Current Scenario of Herbal Antioxidants

Organised by
Department of Pharmacognosy

CERTIFICATE OF PARTICIPATION

This is to certify that Ms./ Mr./ Mrs./ Dr. KARTHIKEYAN . R

has Delegate/Resource person in seminar on Current Scenario of Herbal Antioxidants held on 07.06.2018.

Co - Convenor

Convenor

Dr. N. SENTHILKUMAR,





## IKKMMRF'S ANNAI JKK SAMPOORANI AMMAL COLLEGE OF PHARMACY. KOMARAPALAYAM



Seminar on

Current Scenario of Herbal Antioxidants

Organised by Department of Pharmacognosy

CERTIFICATE OF PARTICIPATION

This is to certify that Ms./ Mr./ Mrs./ Dr. YAZHL MOZHI. S

has Delegate/Resource person in seminar on Current Scenario of Herbal Antioxidants held on 07.06.2018.

Co - Convenor

Convenor

Dr. N. SENTHILKUMAR, PRINCIPAL.

