

Experiment Number: 20007 - 03
Test Type: 90-DAY
Route: GAVAGE
Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract
CAS Number: 9000-38-8

Date Report Requested: 09/13/2016
Time Report Requested: 11:41:17
First Dose M/F: 09/15/03 / 09/16/03
Lab: BAT

NTP Study Number: C20007
Lock Date: 05/24/2004
Cage Range: ALL
Date Range: ALL
Reasons For Removal: ALL
Removal Date Range: ALL
Treatment Groups: Include ALL
Study Gender: Both
TDMSE Version: 3.0.2.3_002
PWG Approval Date: NONE

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 1

TRT#: 1

SEX: Male

DAY ON TEST: 93

DOSE: 0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304802

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Epididymis | * Esophagus |
| * Eye | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Lymph Node, Mesenteric | * Mammary Gland | * Nose | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Preputial Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Testes | * Thymus |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|-------------------|-----------------|-----------------------|-------------------------|
| * Harderian Gland | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Infiltration Cellular | Mononuclear CI, Minimal |
| | | Mineralization | Minimal |
| | | Nephropathy | Minimal |
| * Liver | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | Interstitialium | Inflammation | Chronic, Minimal |

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 2

TRT#: 1

SEX: Male

DAY ON TEST: 93

DOSE: 0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304803

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Epididymis | * Esophagus |
| * Eye | * Harderian Gland | * Heart | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nose | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Preputial Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Testes | * Thymus | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|----------|-----------------|-----------------------|-------------------------|
| * Kidney | | Mineralization | Minimal |
| | | Nephropathy | Minimal |
| * Liver | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | Interstitialium | Infiltration Cellular | Mononuclear CI, Minimal |
| | | Metaplasia | Osseous, Focal, Minimal |

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 3

TRT#: 1

SEX: Male

DAY ON TEST: 93

DOSE: 0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304804

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Epididymis | * Esophagus |
| * Eye | * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lung | * Lymph Node, Mesenteric | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Preputial Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Testes | * Thymus |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

- | | |
|--------------------------|-----------------|
| * Lymph Node, Mandibular | * Mammary Gland |
|--------------------------|-----------------|

OBSERVATIONS

- | | | |
|----------|-----------------------|-------------------------|
| * Heart | Cardiomyopathy | Mild |
| * Kidney | Mineralization | Minimal |
| | Nephropathy | Minimal |
| * Liver | Infiltration Cellular | Mononuclear CI, Minimal |
| * Nose | Inflammation | Suppurative, Minimal |

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

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First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 4

TRT#: 1

SEX: Male

DAY ON TEST: 93

DOSE: 0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304805

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Epididymis | * Esophagus |
| * Eye | * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lung | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nose | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Preputial Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Testes | * Thymus | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | |
|----------|-----------------------|-------------------------|
| * Heart | Cardiomyopathy | Minimal |
| * Kidney | Nephropathy | Minimal |
| * Liver | Infiltration Cellular | Mononuclear CI, Minimal |

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

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Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 5

TRT#: 1

SEX: Male

DAY ON TEST: 93

DOSE: 0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304806

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Epididymis | * Esophagus |
| * Eye | * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lymph Node, Mesenteric | * Nose | * Parathyroid Gland |
| * Pituitary Gland | * Preputial Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Skin | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Testes | * Thymus | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

MISSING

- | | |
|--------------------------|-----------------|
| * Lymph Node, Mandibular | * Mammary Gland |
|--------------------------|-----------------|

OBSERVATIONS

- | | | | |
|------------|-----------------|---------------------------|-------------------------|
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Infiltration Cellular | Mononuclear CI, Minimal |
| | | Vacuolization Cytoplasmic | Minimal |
| * Lung | Interstitialium | Infiltration Cellular | Mononuclear CI, Minimal |
| * Pancreas | Acinus | Atrophy | Minimal |

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

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Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 6

TRT#: 1

SEX: Male

DAY ON TEST: 93

DOSE: 0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304807

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Epididymis | * Esophagus |
| * Eye | * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lymph Node, Mesenteric | * Mammary Gland | * Nose |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Preputial Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Testes |
| * Thymus | * Trachea | * Urinary Bladder | |

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | |
|---|-------------------------------|-------------------------|
| * Heart | Cardiomyopathy | Minimal |
| * Kidney | Accumulation, Hyaline Droplet | Mild |
| * Liver | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | Metaplasia | Osseous, Minimal |
| Note: Eosinophilic crystals noted in alveoli. | | |
| * Thyroid Gland | Cyst | |

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 7

TRT#: 1

SEX: Male

DAY ON TEST: 93

DOSE: 0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304808

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Epididymis | * Esophagus |
| * Eye | * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lung | * Lymph Node, Mesenteric | * Mammary Gland |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Preputial Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Testes |
| * Thymus | * Trachea | * Urinary Bladder | |

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|-----------------|---------------|-------------------------------|-------------------------|
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Accumulation, Hyaline Droplet | Mild |
| | | Nephropathy | Minimal |
| * Liver | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Nose | Squam Epithel | Hyperplasia | Squamous, Minimal |
| * Thyroid Gland | | Cyst | |

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

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Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 8

TRT#: 1

SEX: Male

DAY ON TEST: 93

DOSE: 0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304809

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Epididymis | * Esophagus |
| * Eye | * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Liver | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nose | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Preputial Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Testes | * Thymus | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|----------|--------------|-----------------------|-------------------------|
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Casts Protein | Minimal |
| * Lung | Interstitial | Infiltration Cellular | Mononuclear CI, Minimal |

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 9

TRT#: 1

SEX: Male

DAY ON TEST: 93

DOSE: 0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304810

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Epididymis | * Esophagus |
| * Eye | * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lung | * Lymph Node, Mesenteric | * Nose |
| * Pancreas | * Parathyroid Gland | * Preputial Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Testes | * Thymus |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

- | | |
|--------------------------|-----------------|
| * Lymph Node, Mandibular | * Mammary Gland |
|--------------------------|-----------------|

OBSERVATIONS

- | | | |
|-------------------|----------------------------------|-------------------------|
| * Heart | Cardiomyopathy | Minimal |
| * Kidney | Mineralization | Minimal |
| | Nephropathy | Minimal |
| * Liver | Hematopoietic Cell Proliferation | Minimal |
| | Infiltration Cellular | Mononuclear Cl, Minimal |
| * Pituitary Gland | Pars Distalis | Hypertrophy |
| | | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 10

TRT#: 1

SEX: Male

DAY ON TEST: 93

DOSE: 0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304811

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Esophagus | * Eye |
| * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Kidney | * Lymph Node, Mesenteric | * Mammary Gland | * Nose |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Preputial Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Testes |
| * Thymus | * Thyroid Gland | * Trachea | * Urinary Bladder |

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|--------------|----------|-----------------------|-------------------------|
| * Epididymis | | Inflammation | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Liver | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 11

TRT#: 3

SEX: Male

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304812

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 12

TRT#: 3

SEX: Male

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304813

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 13

TRT#: 3

SEX: Male

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304814

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 14

TRT#: 3

SEX: Male

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304815

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 15

TRT#: 3

SEX: Male

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304816

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 16

TRT#: 3

SEX: Male

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304817

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 17

TRT#: 3

SEX: Male

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304818

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Hematopoietic Cell Proliferation

Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 18

TRT#: 3

SEX: Male

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304819

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 19

TRT#: 3

SEX: Male

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304820

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 20

TRT#: 3

SEX: Male

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304821

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 21

TRT#: 5

SEX: Male

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304822

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 22

TRT#: 5

SEX: Male

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304823

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 23

TRT#: 5

SEX: Male

DAY ON TEST: 22

DOSE: 0.25 G/KG

DISP: Moribund Sacrifice

HISTO: 0304824

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Blood Vessel	Bone
Bone Marrow	Brain	Epididymis	Esophagus
Eye	Harderian Gland	Heart	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Intestine Small, Jejunum	Islets, Pancreatic	Kidney	* Liver
Lung	Lymph Node, Mesenteric	Mammary Gland	Nose
Pancreas	Parathyroid Gland	Pituitary Gland	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Skin
Spleen	Stomach, Forestomach	Stomach, Glandular	Testes
Thymus	Thyroid Gland	Trachea	Urinary Bladder

MISSING

Lymph Node, Mandibular

Animal Note: COD = chylothorax

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 24

TRT#: 5

SEX: Male

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304825

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 25

TRT#: 5

SEX: Male

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304826

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 26

TRT#: 5

SEX: Male

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304827

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 27

TRT#: 5

SEX: Male

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304828

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 28

TRT#: 5

SEX: Male

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304829

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 29

TRT#: 5

SEX: Male

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304830

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 30

TRT#: 5

SEX: Male

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304831

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 31

TRT#: 7

SEX: Male

DAY ON TEST: 93

DOSE: 0.5 G/KG

DISP: Terminal Sacrifice

HISTO: 0304832

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Hepatodiaphragmatic Nodule

[Hepatodiaphragmatic Nodule TGLs = 1-14]

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 32

TRT#: 7

SEX: Male

DAY ON TEST: 93

DOSE: 0.5 G/KG

DISP: Terminal Sacrifice

HISTO: 0304833

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 33

TRT#: 7

SEX: Male

DAY ON TEST: 93

DOSE: 0.5 G/KG

DISP: Terminal Sacrifice

HISTO: 0304834

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Bile Duct

Hyperplasia
Infiltration Cellular

Minimal
Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 34

TRT#: 7

SEX: Male

DAY ON TEST: 93

DOSE: 0.5 G/KG

DISP: Terminal Sacrifice

HISTO: 0304835

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 35

TRT#: 7

SEX: Male

DAY ON TEST: 93

DOSE: 0.5 G/KG

DISP: Terminal Sacrifice

HISTO: 0304836

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 36

TRT#: 7

SEX: Male

DAY ON TEST: 93

DOSE: 0.5 G/KG

DISP: Terminal Sacrifice

HISTO: 0304837

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 37

TRT#: 7

SEX: Male

DAY ON TEST: 93

DOSE: 0.5 G/KG

DISP: Terminal Sacrifice

HISTO: 0304838

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 38

TRT#: 7

SEX: Male

DAY ON TEST: 93

DOSE: 0.5 G/KG

DISP: Terminal Sacrifice

HISTO: 0304839

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 39

TRT#: 7

SEX: Male

DAY ON TEST: 93

DOSE: 0.5 G/KG

DISP: Terminal Sacrifice

HISTO: 0304840

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Vacuolization Cytoplasmic

Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 40

TRT#: 7

SEX: Male

DAY ON TEST: 93

DOSE: 0.5 G/KG

DISP: Terminal Sacrifice

HISTO: 0304841

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 41

TRT#: 9

SEX: Male

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304842

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Spleen

* Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 42

TRT#: 9

SEX: Male

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304843

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Spleen

* Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 43

TRT#: 9

SEX: Male

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304844

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Spleen

* Thymus

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 44

TRT#: 9

SEX: Male

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304845

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Liver

* Spleen

* Thymus

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 45

TRT#: 9

SEX: Male

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304846

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Liver

* Thymus

OBSERVATIONS

* Spleen

Hematopoietic Cell Proliferation

Mild

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 46

TRT#: 9

SEX: Male

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304847

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Spleen

* Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 47

TRT#: 9

SEX: Male

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304848

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Spleen

* Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 48

TRT#: 9

SEX: Male

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304849

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Liver

* Spleen

* Thymus

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 49

TRT#: 9

SEX: Male

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304850

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Liver

* Spleen

* Thymus

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 50

TRT#: 9

SEX: Male

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304851

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Spleen

* Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 51

TRT#: 11

SEX: Male

DAY ON TEST: 93

DOSE: 2.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304852

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Epididymis | * Esophagus |
| * Eye | * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Kidney | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nose | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Preputial Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Testes | * Thymus | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|---------|-----------------|-----------------------|-------------------------|
| * Heart | | Cardiomyopathy | Minimal |
| * Liver | | Infiltration Cellular | Mixed Cell, Minimal |
| * Lung | Interstitialium | Infiltration Cellular | Mononuclear CI, Minimal |
| | | Inflammation | Minimal |

Note: subpleural inflammation (slide 3)

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 52

TRT#: 11

SEX: Male

DAY ON TEST: 93

DOSE: 2.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304853

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Epididymis | * Esophagus |
| * Eye | * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lymph Node, Mesenteric | * Mammary Gland | * Nose |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Preputial Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Testes |
| * Thymus | * Trachea | * Urinary Bladder | |

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- * Epididymis
 - Note: one epididymis missing
- * Heart
 - Cardiomyopathy
 - Minimal
- * Kidney
 - Mineralization
 - Minimal
 - Nephropathy
 - Minimal
- * Liver
 - Infiltration Cellular
 - Mononuclear CI, Minimal
- * Lung
 - Interstitial
 - Inflammation
 - Chronic, Minimal
- * Thyroid Gland
 - Cyst

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 53

TRT#: 11

SEX: Male

DAY ON TEST: 80

DOSE: 2.0 G/KG

DISP: Natural Death

HISTO: 0304854

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Epididymis | * Esophagus |
| * Eye | * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Liver | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nose | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Preputial Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Stomach, Glandular | * Testes | * Thymus |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | |
|------------------------|----------------|------------------------|
| * Heart | Cardiomyopathy | Minimal |
| * Kidney | Nephropathy | Minimal |
| * Lung | Inflammation | Granulomatous, Minimal |
| * Spleen | Atrophy | Mild |
| * Stomach, Forestomach | Mineralization | Mild |

PRIMARY CAUSE OF DEATH

- UNCERTAIN

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 54

TRT#: 11

SEX: Male

DAY ON TEST: 93

DOSE: 2.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304855

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Epididymis | * Esophagus |
| * Eye | * Harderian Gland | * Heart | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Kidney | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nose | * Pancreas | * Parathyroid Gland |
| * Pituitary Gland | * Preputial Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Skin | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Testes | * Thymus | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|---------|--------------|-----------------------|-------------------------|
| * Liver | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | Interstitial | Infiltration Cellular | Mononuclear CI, Minimal |
| | | Inflammation | Granulomatous, Minimal |
| | | Metaplasia | Osseous, Minimal |

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 55

TRT#: 11

SEX: Male

DAY ON TEST: 80

DOSE: 2.0 G/KG

DISP: Natural Death

HISTO: 0304856

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Epididymis | * Esophagus |
| * Eye | * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Liver | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nose | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Preputial Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Stomach, Glandular | * Testes | * Thymus |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | |
|------------------------|----------------|---------|
| * Heart | Cardiomyopathy | Minimal |
| * Kidney | Nephropathy | Minimal |
| * Lung | Inflammation | Minimal |
| * Spleen | Atrophy | Minimal |
| * Stomach, Forestomach | Inflammation | Minimal |

PRIMARY CAUSE OF DEATH

- UNCERTAIN

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 56

TRT#: 11

SEX: Male

DAY ON TEST: 93

DOSE: 2.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304857

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Epididymis | * Esophagus |
| * Eye | * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Liver | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nose | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Preputial Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Testes | * Thymus | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|----------|--------------|-----------------------|-------------------------|
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Mineralization | Minimal |
| | | Nephropathy | Minimal |
| * Lung | Interstitial | Infiltration Cellular | Mononuclear CI, Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 57

TRT#: 11

SEX: Male

DAY ON TEST: 93

DOSE: 2.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304858

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Epididymis | * Esophagus |
| * Eye | * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lymph Node, Mesenteric | * Mammary Gland | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Preputial Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Testes | * Thymus |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | |
|----------|-------------------------------|-------------------------|
| * Heart | Cardiomyopathy | Minimal |
| * Kidney | Accumulation, Hyaline Droplet | Mild |
| | Nephropathy | Minimal |
| * Liver | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | Inflammation | Minimal |
| * Nose | Inflammation | Acute, Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 58

TRT#: 11

SEX: Male

DAY ON TEST: 93

DOSE: 2.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304859

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Epididymis | * Esophagus |
| * Eye | * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lung | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nose | * Pancreas | * Pituitary Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Testes | * Thymus |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

- | | |
|--------------------------|---------------------|
| * Lymph Node, Mandibular | * Parathyroid Gland |
|--------------------------|---------------------|

OBSERVATIONS

- | | | |
|-------------------|-----------------------|-------------------------|
| * Heart | Cardiomyopathy | Minimal |
| * Kidney | Mineralization | Minimal |
| | Nephropathy | Minimal |
| * Liver | Infiltration Cellular | Mononuclear CI, Minimal |
| * Preputial Gland | Inflammation | Minimal |

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 59

TRT#: 11

SEX: Male

DAY ON TEST: 93

DOSE: 2.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304860

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Epididymis | * Esophagus |
| * Eye | * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lymph Node, Mesenteric | * Mammary Gland | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Preputial Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Testes | * Thymus |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|----------|-----------------|-----------------------|-------------------------|
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | Interstitialium | Infiltration Cellular | Mononuclear CI, Minimal |
| * Nose | | Inflammation | Minimal |

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 60

TRT#: 11

SEX: Male

DAY ON TEST: 5

DOSE: 2.0 G/KG

DISP: Natural Death

HISTO: 0304861

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Epididymis | * Esophagus |
| * Eye | * Harderian Gland | * Heart | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Kidney | * Liver |
| * Lung | * Lymph Node, Mesenteric | * Nose | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Preputial Gland | * Prostate |
| * Salivary Glands | * Skin | * Stomach, Glandular | * Testes |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

- | | |
|--------------------------|-----------------|
| * Lymph Node, Mandibular | * Mammary Gland |
|--------------------------|-----------------|

OBSERVATIONS

- | | | |
|------------------------|----------|----------|
| * Seminal Vesicle | Atrophy | Moderate |
| * Spleen | Atrophy | Mild |
| * Stomach, Forestomach | Ulcer | Mild |
| * Thymus | Necrosis | Mild |

PRIMARY CAUSE OF DEATH

- UNCERTAIN

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 61

TRT#: 2

SEX: Female

DAY ON TEST: 93

DOSE: 0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304862

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Clitoral Gland | * Esophagus |
| * Eye | * Harderian Gland | * Heart | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Lung | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nose | * Ovary | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Salivary Glands | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Thymus |
| * Thyroid Gland | * Trachea | * Urinary Bladder | * Uterus |

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | |
|----------|----------------------------|-------------------------|
| * Kidney | Mineralization | Minimal |
| * Liver | Hepatodiaphragmatic Nodule | |
| | Infiltration Cellular | Mononuclear CI, Minimal |
- [Hepatodiaphragmatic Nodule TGLs = 1-13]

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 62

TRT#: 2

SEX: Female

DAY ON TEST: 93

DOSE: 0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304863

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Clitoral Gland | * Esophagus |
| * Eye | * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lymph Node, Mesenteric | * Mammary Gland | * Nose |
| * Ovary | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Salivary Glands | * Skin | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Thymus | * Thyroid Gland | * Trachea |
| * Urinary Bladder | * Uterus | | |

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|----------|----------|-----------------------|-------------------------|
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Mineralization | Minimal |
| * Liver | | Infiltration Cellular | Mononuclear CI, Minimal |
| | | Inflammation | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 63

TRT#: 2

SEX: Female

DAY ON TEST: 93

DOSE: 0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304864

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Clitoral Gland | * Esophagus |
| * Eye | * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lymph Node, Mesenteric | * Mammary Gland | * Nose |
| * Ovary | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Salivary Glands | * Skin | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Thymus | * Trachea | * Urinary Bladder |
| * Uterus | | | |

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | |
|-----------------|-----------------------|-------------------------|
| * Heart | Cardiomyopathy | Minimal |
| * Kidney | Mineralization | Minimal |
| * Liver | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | Metaplasia | Osseous, Minimal |
| * Thyroid Gland | Cyst | |

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 64

TRT#: 2

SEX: Female

DAY ON TEST: 93

DOSE: 0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304865

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Clitoral Gland | * Esophagus |
| * Eye | * Harderian Gland | * Heart | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Lung | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nose | * Ovary | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Salivary Glands | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Thymus |
| * Thyroid Gland | * Trachea | * Urinary Bladder | * Uterus |

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | |
|----------|-----------------------|-------------------------|
| * Kidney | Mineralization | Minimal |
| * Liver | Infiltration Cellular | Mononuclear CI, Minimal |

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 65

TRT#: 2

SEX: Female

DAY ON TEST: 18

DOSE: 0 G/KG

DISP: Moribund Sacrifice

HISTO: 0304866

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Clitoral Gland | * Esophagus |
| * Eye | * Harderian Gland | * Heart | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Kidney | * Liver |
| * Lung | * Lymph Node, Mesenteric | * Mammary Gland | * Nose |
| * Ovary | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Salivary Glands | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | * Uterus | |

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | |
|-----------------|----------|------|
| * Spleen | Atrophy | Mild |
| * Thymus | Necrosis | Mild |
| * Thyroid Gland | Cyst | |

Animal Note: COD = chylothorax

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 66

TRT#: 2

SEX: Female

DAY ON TEST: 93

DOSE: 0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304867

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Clitoral Gland | * Esophagus |
| * Eye | * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lymph Node, Mesenteric | * Mammary Gland | * Nose |
| * Ovary | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Salivary Glands | * Skin | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Thymus | * Thyroid Gland | * Trachea |
| * Urinary Bladder | * Uterus | | |

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|----------|--------------|-----------------------|-------------------------|
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Mineralization | Minimal |
| * Liver | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | Interstitial | Infiltration Cellular | Mononuclear CI, Minimal |

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 67

TRT#: 2

SEX: Female

DAY ON TEST: 93

DOSE: 0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304868

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Clitoral Gland | * Esophagus |
| * Eye | * Harderian Gland | * Heart | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Lung | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nose | * Ovary | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Salivary Glands | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Thymus |
| * Thyroid Gland | * Trachea | * Urinary Bladder | * Uterus |

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | |
|-----------|-----------------------|-------------------------|
| * Kidney | Mineralization | Minimal |
| * Liver | Infiltration Cellular | Mononuclear CI, Minimal |
| Mesentery | Necrosis | Focal, Mild |
- Note: TGL1 = mesenteric fat nodule
[Necrosis TGLs = 1-13]

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 68

TRT#: 2

SEX: Female

DAY ON TEST: 93

DOSE: 0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304869

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Clitoral Gland | * Esophagus |
| * Eye | * Harderian Gland | * Heart | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nose | * Ovary | * Pancreas | * Parathyroid Gland |
| * Pituitary Gland | * Salivary Glands | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Thymus | * Thyroid Gland |
| * Trachea | * Urinary Bladder | * Uterus | |

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|----------|------------------------------|----------------------------|-------------------------|
| * Kidney | | Mineralization | Minimal |
| * Liver | | Hepatodiaphragmatic Nodule | |
| | | Infiltration Cellular | Mononuclear CI, Minimal |
| | [Hepatodiaphragmatic Nodule | | |
| | TGLs = 1-7] | | |
| * Lung | Interstitialium | Infiltration Cellular | Mononuclear CI, Minimal |

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 69

TRT#: 2

SEX: Female

DAY ON TEST: 93

DOSE: 0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304870

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Clitoral Gland | * Esophagus |
| * Eye | * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lymph Node, Mesenteric | * Mammary Gland | * Nose |
| * Ovary | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Salivary Glands | * Skin | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Thymus | * Thyroid Gland | * Trachea |
| * Urinary Bladder | * Uterus | | |

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|----------|-----------------|-----------------------|-------------------------|
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Mineralization | Minimal |
| * Liver | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | Interstitialium | Infiltration Cellular | Mononuclear CI, Minimal |
| * Uterus | | | |

Note: Dilatation of uterine horns noted (bilateral) and is considered physiologic.

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 70

TRT#: 2

SEX: Female

DAY ON TEST: 93

DOSE: 0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304871

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Clitoral Gland | * Esophagus |
| * Eye | * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Kidney | * Liver | * Lung |
| * Lymph Node, Mesenteric | * Mammary Gland | * Nose | * Ovary |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Skin | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Thymus | * Thyroid Gland | * Trachea | * Urinary Bladder |
| * Uterus | | | |

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | |
|----------|----------------|---------|
| * Heart | Cardiomyopathy | Minimal |
| * Uterus | | |

Note: Note: bilateral dilatation of uterine horns of which is considered physiologic.

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 71

TRT#: 4

SEX: Female

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304872

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 72

TRT#: 4

SEX: Female

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304873

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 73

TRT#: 4

SEX: Female

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304874

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 74

TRT#: 4

SEX: Female

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304875

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 75

TRT#: 4

SEX: Female

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304876

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 76

TRT#: 4

SEX: Female

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304877

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 77

TRT#: 4

SEX: Female

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304878

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Hepatodiaphragmatic Nodule

Infiltration Cellular

Mononuclear CI, Minimal

[Hepatodiaphragmatic Nodule TGLs = 1-13]

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 78

TRT#: 4

SEX: Female

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304879

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 79

TRT#: 4

SEX: Female

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304880

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 80

TRT#: 4

SEX: Female

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304881

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 81

TRT#: 6

SEX: Female

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304882

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 82

TRT#: 6

SEX: Female

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304883

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 83

TRT#: 6

SEX: Female

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304884

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 84

TRT#: 6

SEX: Female

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304885

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 85

TRT#: 6

SEX: Female

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304886

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 86

TRT#: 6

SEX: Female

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304887

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 87

TRT#: 6

SEX: Female

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304888

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 88

TRT#: 6

SEX: Female

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304889

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 89

TRT#: 6

SEX: Female

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304890

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 90

TRT#: 6

SEX: Female

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304891

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 91

TRT#: 8

SEX: Female

DAY ON TEST: 93

DOSE: 0.5 G/KG

DISP: Terminal Sacrifice

HISTO: 0304892

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 92

TRT#: 8

SEX: Female

DAY ON TEST: 93

DOSE: 0.5 G/KG

DISP: Terminal Sacrifice

HISTO: 0304893

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 93

TRT#: 8

SEX: Female

DAY ON TEST: 93

DOSE: 0.5 G/KG

DISP: Terminal Sacrifice

HISTO: 0304894

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Hepatodiaphragmatic Nodule

Infiltration Cellular

Mononuclear CI, Minimal

[Hepatodiaphragmatic Nodule TGLs = 1-13]

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 94

TRT#: 8

SEX: Female

DAY ON TEST: 93

DOSE: 0.5 G/KG

DISP: Terminal Sacrifice

HISTO: 0304895

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 95

TRT#: 8

SEX: Female

DAY ON TEST: 93

DOSE: 0.5 G/KG

DISP: Terminal Sacrifice

HISTO: 0304896

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 96

TRT#: 8

SEX: Female

DAY ON TEST: 93

DOSE: 0.5 G/KG

DISP: Terminal Sacrifice

HISTO: 0304897

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 97

TRT#: 8

SEX: Female

DAY ON TEST: 93

DOSE: 0.5 G/KG

DISP: Terminal Sacrifice

HISTO: 0304898

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 98

TRT#: 8

SEX: Female

DAY ON TEST: 93

DOSE: 0.5 G/KG

DISP: Terminal Sacrifice

HISTO: 0304899

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Minimal

Infiltration Cellular

Mononuclear CI, Minimal

Necrosis

Fatty, Mild

Mesentery

[Necrosis TGLs = 1-13]

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 99

TRT#: 8

SEX: Female

DAY ON TEST: 93

DOSE: 0.5 G/KG

DISP: Terminal Sacrifice

HISTO: 0304900

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 100

TRT#: 8

SEX: Female

DAY ON TEST: 93

DOSE: 0.5 G/KG

DISP: Terminal Sacrifice

HISTO: 0304901

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 101

TRT#: 10

SEX: Female

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304902

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Spleen

* Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 102

TRT#: 10

SEX: Female

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304903

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Liver

* Spleen

* Thymus

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 103

TRT#: 10

SEX: Female

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304904

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Spleen

* Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 104

TRT#: 10

SEX: Female

DAY ON TEST: 32

DOSE: 1.0 G/KG

DISP: Natural Death

HISTO: 0304905

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Blood Vessel	Bone
* Bone Marrow	Brain	Clitoral Gland	Esophagus
Eye	Harderian Gland	Heart	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Intestine Small, Jejunum	Islets, Pancreatic	Lymph Node, Mesenteric	Mammary Gland
Nose	Ovary	Pancreas	Parathyroid Gland
Pituitary Gland	Salivary Glands	Skin	* Spleen
Stomach, Forestomach	Stomach, Glandular	* Thymus	Thyroid Gland
Trachea	Urinary Bladder	Uterus	

MISSING

Lymph Node, Mandibular

OBSERVATIONS

Kidney		Mineralization	Minimal
* Liver		Congestion	Mild
	Hepatocyte	Hypertrophy	Mild
		Infiltration Cellular	Mononuclear CI, Minimal
[Hypertrophy TGLs = 1-6+7]			
Lung	Interstitialium	Infiltration Cellular	Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

- UNCERTAIN

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 105

TRT#: 10

SEX: Female

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304906

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Spleen

* Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 106

TRT#: 10

SEX: Female

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304907

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Spleen

* Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 107

TRT#: 10

SEX: Female

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304908

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Spleen

* Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 108

TRT#: 10

SEX: Female

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304909

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Spleen

* Thymus

OBSERVATIONS

* Liver

Infiltration Cellular
Inflammation

Mononuclear CI, Minimal
Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 109

TRT#: 10

SEX: Female

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304910

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Spleen

* Thymus

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 110

TRT#: 10

SEX: Female

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304911

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Spleen

* Thymus

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy
Infiltration Cellular

Minimal
Mononuclear CI, Minimal

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 111

TRT#: 12

SEX: Female

DAY ON TEST: 93

DOSE: 2.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304912

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Clitoral Gland | * Esophagus |
| * Eye | * Harderian Gland | * Heart | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nose | * Ovary | * Pancreas | * Parathyroid Gland |
| * Pituitary Gland | * Salivary Glands | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Thymus | * Thyroid Gland |
| * Trachea | * Urinary Bladder | * Uterus | |

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|----------|-----------------|-----------------------|-------------------------|
| * Kidney | | Mineralization | Minimal |
| * Liver | Hepatocyte | Hypertrophy | Mild |
| | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | Interstitialium | Infiltration Cellular | Mononuclear CI, Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 112

TRT#: 12

SEX: Female

DAY ON TEST: 93

DOSE: 2.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304913

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lung	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

* Eye	Cornea	Neovascularization	Mild
* Kidney		Mineralization	Minimal
* Liver	Hepatocyte	Hypertrophy	Minimal
* Thyroid Gland		Cyst	

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 113

TRT#: 12

SEX: Female

DAY ON TEST: 4

DOSE: 2.0 G/KG

DISP: Natural Death

HISTO: 0304914

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Clitoral Gland | * Esophagus |
| * Eye | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Kidney | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nose | * Ovary | * Pancreas | * Parathyroid Gland |
| * Pituitary Gland | * Salivary Glands | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Trachea | * Urinary Bladder | * Uterus |

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|-------------------|------------|-----------------------|----------------------|
| * Harderian Gland | | Infiltration Cellular | Mononuclear CI, Mild |
| * Liver | Hepatocyte | Hypertrophy | Mild |
| * Lung | | Congestion | Acute, Diffuse, Mild |
| * Spleen | | Atrophy | Mild |
| * Thymus | | Necrosis | Mild |
| * Thyroid GI | | | |

Note: Cyst is Keratin.

PRIMARY CAUSE OF DEATH

- UNCERTAIN

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 114

TRT#: 12

SEX: Female

DAY ON TEST: 93

DOSE: 2.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304915

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Clitoral Gland | * Esophagus |
| * Eye | * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Kidney | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nose | * Ovary | * Pancreas | * Parathyroid Gland |
| * Pituitary Gland | * Salivary Glands | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Thymus | * Thyroid Gland |
| * Trachea | * Urinary Bladder | * Uterus | |

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|---------|------------|-----------------------|-------------------------|
| * Heart | | Cardiomyopathy | Minimal |
| * Liver | Hepatocyte | Hypertrophy | Minimal |
| | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 115

TRT#: 12

SEX: Female

DAY ON TEST: 93

DOSE: 2.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304916

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Clitoral Gland | * Esophagus |
| * Eye | * Harderian Gland | * Heart | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Kidney | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nose | * Ovary | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Salivary Glands | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Thymus |
| * Thyroid Gland | * Trachea | * Urinary Bladder | * Uterus |

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|---------|--------------|-----------------------|-------------------------|
| * Liver | Hepatocyte | Hypertrophy | Mild |
| * Lung | Interstitial | Infiltration Cellular | Mononuclear CI, Minimal |

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 116

TRT#: 12

SEX: Female

DAY ON TEST: 44

DOSE: 2.0 G/KG

DISP: Natural Death

HISTO: 0304917

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Adrenal Medulla
- * Blood Vessel
- * Bone Marrow
- * Brain
- * Clitoral Gland
- * Esophagus
- * Eye
- * Harderian Gland
- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum
- * Islets, Pancreatic
- * Kidney
- * Lymph Node, Mesenteric
- * Mammary Gland
- * Nose
- * Ovary
- * Parathyroid Gland
- * Pituitary Gland
- * Salivary Glands
- * Skin
- * Spleen
- * Stomach, Forestomach
- * Stomach, Glandular
- * Thymus
- * Thyroid Gland
- * Trachea
- * Urinary Bladder
- * Uterus

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|------------|------------|-----------------------|---------------------|
| * Heart | | Cardiomyopathy | Minimal |
| * Liver | Hepatocyte | Hypertrophy | Mild |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Pancreas | Acinus | Atrophy | Minimal |

PRIMARY CAUSE OF DEATH

- UNCERTAIN

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 117

TRT#: 12

SEX: Female

DAY ON TEST: 2

DOSE: 2.0 G/KG

DISP: Natural Death

HISTO: 0304918

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Adrenal Medulla
- * Blood Vessel
- * Bone
- * Bone Marrow
- * Clitoral Gland
- * Esophagus
- * Eye
- * Harderian Gland
- * Heart
- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum
- * Islets, Pancreatic
- * Kidney
- * Lymph Node, Mesenteric
- * Mammary Gland
- * Nose
- * Ovary
- * Pancreas
- * Parathyroid Gland
- * Pituitary Gland
- * Salivary Glands
- * Skin
- * Stomach, Forestomach
- * Stomach, Glandular
- * Thyroid Gland
- * Trachea
- * Urinary Bladder
- * Uterus

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|---------------------------|-----------------|-----------------------|-------------------------|
| * Brain | Cerebrum | Hemorrhage | Mild |
| [Hemorrhage TGLs = 1-9] | | | |
| * Liver | Hepatocyte | Hypertrophy | Moderate |
| * Lung | Interstitialium | Infiltration Cellular | Mononuclear CI, Minimal |
| * Spleen | | Atrophy | Mild |
| * Thymus | | Necrosis | Mild |

PRIMARY CAUSE OF DEATH

- UNCERTAIN

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 118

TRT#: 12

SEX: Female

DAY ON TEST: 4

DOSE: 2.0 G/KG

DISP: Natural Death

HISTO: 0304919

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Clitoral Gland | * Esophagus |
| * Eye | * Harderian Gland | * Heart | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Kidney | * Lung |
| * Lymph Node, Mesenteric | * Mammary Gland | * Nose | * Ovary |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Skin | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | * Uterus | | |

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|------------------------|------------|----------------|---------|
| * Liver | Hepatocyte | Hypertrophy | Mild |
| * Spleen | | Atrophy | Mild |
| * Stomach, Forestomach | | Mineralization | Minimal |
| | | Ulcer | Mild |
| * Thymus | | Necrosis | Mild |

PRIMARY CAUSE OF DEATH

- UNCERTAIN

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 119

TRT#: 12

SEX: Female

DAY ON TEST: 93

DOSE: 2.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304920

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Clitoral Gland | * Esophagus |
| * Eye | * Harderian Gland | * Heart | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Kidney | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nose | * Ovary | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Salivary Glands | * Skin |
| * Spleen | * Stomach, Glandular | * Thymus | * Thyroid Gland |
| * Trachea | * Urinary Bladder | * Uterus | |

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|---|------------|---------------------------------------|--------------------------------|
| * Liver | Hepatocyte | Hypertrophy | Minimal |
| * Lung | Alveolus | Infiltration Cellular
Inflammation | Histiocyte, Minimal
Minimal |
| Note: Few eosinophilic crystals noted in alveoli (slide 3). | | | |
| * Stomach, Forestomach | | Inflammation | Minimal |

Experiment Number: 20007 - 03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: RATS/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 09/13/2016

Time Report Requested: 11:41:17

First Dose M/F: 09/15/03 / 09/16/03

Lab: BAT

ANIMAL ID: 120

TRT#: 12

SEX: Female

DAY ON TEST: 93

DOSE: 2.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304921

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Clitoral Gland | * Esophagus |
| * Harderian Gland | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lung | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nose | * Ovary | * Pancreas | * Parathyroid Gland |
| * Pituitary Gland | * Salivary Glands | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Thymus | * Thyroid Gland |
| * Trachea | * Urinary Bladder | * Uterus | |

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|----------|------------|--------------------|---------|
| * Eye | Cornea | Neovascularization | Mild |
| * Kidney | | Mineralization | Minimal |
| * Liver | Hepatocyte | Hypertrophy | Minimal |

*** END OF REPORT ***