# **AGRICULTURE**

# INTRODUCTION TO AGRICULTURE

#### **Introduction to Agriculture**

All of the Jewish festival holidays had an agricultural element to them.

Agricultural laws include *Kilayim, Orla, Reishit, Teruma/Ma'aser, Shmita, and Yashan*, as well as special laws applying only to fruit trees. Some of these laws still apply today by *Torah* law (d'oraita) while others, such as First Fruits (*bikurim*), only apply when the Jerusalem *Temple* stands and so are not practiced now. Others are observed today as "practice" for when the *Temple* is rebuilt.

# FORBIDDEN MIXTURES (KILAYIM)

# INTRODUCTION TO FORBIDDEN MIXTURES (KILAYIM)

## **Introduction to Forbidden Mixtures/Kilayim**

The limits of kilayim keep:

- Individual creations true to themselves, in the way they were created by God, and
- Different, or opposing, spiritual forces governing creation in their own places and within their own bounds.

In the holiness of the <u>Tabernacle</u> or <u>Temple</u>, where opposites were peaceably and constructively resolved, <u>kilayim</u> in the form of <u>sha'atnez</u> was not only permitted but formed the foundation of all main tapestries and two of the High Priest's garments.

NOTE The Shulchan Aruch lists over 120 halachot pertaining to kilayim in planting!

# Kilayim-type laws apply today to:

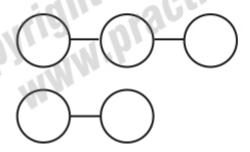
- Animals (not yoking an ox and donkey together; not interbreeding, say, a horse and a donkey to produce a mule),
- Food (not eating *milk* with meat),
- Clothing not wearing a garment made of a mixture of linen and wool (sha'atnez), and
- Plants (interplanting, interbreeding, and grafting different species).

NOTE Vineyards in *Eretz Yisrael* may only be near fruit trees if:

- A wall divides fruit tree and vineyard, OR
- The vineyard is not a bona fide vineyard. A bona fide vineyard has at least 5 grapevines in at least two rows, with at least two vines in one row and three in the other.



# Minimum Kerem: Vineyard of Five Vines in Two Rows \*Note Minimum Row is Two Vines



# FORBIDDEN MIXTURES (KILAYIM): ANIMALS

## **CROSSBREEDING ANIMALS (KILAYIM)**

## Using an Animal Crossbred by Someone Else

You may not crossbreed animals, but you may use such an animal if it was already crossbred by someone else.

# FORBIDDEN MIXTURES (KILAYIM): PLANTS

# FORBIDDEN MIXTURES (KILAYIM): PLANTING IN EARTH

## **Kilayim: Planting in Eretz Yisrael**

Do not plant two species of fruit or vegetable plants (and trees) together ("kilayim") in <u>Eretz Yisrael</u>. The prohibition covers all types of food-producing plants: herbs; vegetables; grains; trees....

EXAMPLE

In <u>Eretz Yisrael</u>, do not plant a vegetable with a fruit or grain or one type of vegetable with another type of vegetable, one type of fruit with a different type of fruit, and one type of grain with another type of grain.

# FORBIDDEN MIXTURES (KILAYIM): PLANTING IN POTS

## **Kilayim: Planting in Pots in Eretz Yisrael**

Within *Eretz Yisrael*, you may not plant disparate species in the same pot if the pot:

- Is made of wood or earthenware, or
- Has a hole in the bottom, regardless of the material it is made from.

If the pot does not have a hole in the bottom and if it is made of plastic, glass, or metal, you may plant multiple species together.

## Kilayim: Planting in Pots outside of Eretz Yisrael

Outside of Eretz Yisrael, plants in pots are not subject to kilayim laws.

# FORBIDDEN MIXTURES (KILAYIM): GRAFTING

## **Grafting When Kilayim**

You may not:

- Graft two trees of different species together (grafting a branch or shoot from one tree onto the trunk of a different type of tree).
- Pay someone else to graft a tree for you, not even a non-Jew.

NOTE You may use such a tree if it was already grafted by someone else.

# **ORLA**

# **ORLA: GENERAL QUESTIONS**

#### **Orla: Which Uses Are Prohibited**

You may not use <u>orla</u> fruit for any type of use or benefit (<u>asur b'hana'a</u>); the prohibition is not just for eating.

## **Orla: Which Fruit Is Orla**

Do not eat tree fruit for the first three years of the tree (*orla*); any tree fruits from the fourth year (*neta revai*) must be redeemed with a *pruta* before eating, even outside of *Eretz Yisrael*.

NOTE It is not possible to redeem *neta revai* in the old city of Jerusalem!

# **Orla: Which Part of the Plant Is Prohibited**

Only *orla* fruit is forbidden, but the tree may be used.

#### Orla: Who Is Prohibited from Growing Orla

Orla applies to fruit grown by both Jews and non-Jews.

## **ORLA: HOW TO CALCULATE**

## **Orla Planting Deadline**

Trees planted at least 45 days before  $\underline{Rosh\ Hashana}$  (that is, by  $\underline{Tu\ B'Av}$ ) are considered to be one year old on that  $Rosh\ Hashana$ .

# **How To Calculate When Orla Is Over**

You may eat tree fruit if the tree's buds appeared after  $\underline{Tu\ B'Shvat}$  of the fourth year. This may be a span of only 2.5 years if the tree was planted on or before  $Tu\ B'Av$  (at least 45 days before  $Rosh\ Hashana$ ):

1st Year Tu B'Av to Rosh Hashana #1

2nd Year Rosh Hashana #1 to Rosh Hashana #2

3rd Year Rosh Hashana #2 to Rosh Hashana #3

4th Year Rosh Hashana #3 to Tu B'Shvat

A fruit tree planted on <u>Tu B'Av</u>, Aug. 15, 2011, will be one year old 6 weeks later, on <u>Rosh Hashana</u>, Sept. 29, 2011. By <u>Rosh Hashana</u>, Sept. 5, 2013, the tree will have completed three years and it enters its fourth year. Buds that appear on or after <u>Tu B'Shvat</u>, Jan. 15, 2014, and

turn into fruit will be *neta revai* and may be redeemed and eaten.

## Orla: Doubt about Tree Age in Eretz Yisrael

Do not eat fruit from a tree growing in <u>Eretz Yisrael</u> if you are not certain about the age of a tree that might be three years old or less.

## Orla: Doubt about Tree Age outside of Eretz Yisrael

You may eat fruit from a tree growing outside of <u>Eretz Yisrael</u> if you are not certain about the age of a tree that might be three years old or less.

**Orla: Transplanted Trees** 

If a tree (whether younger or older than 4 years) is transplanted but did not have enough soil on its roots to live for several years, restart counting *orla* from zero.

## **ORLA: INDIVIDUAL FRUITS**

#### **Orla: Grapes outside of Eretz Yisrael**

Outside of <u>Eretz Yisrael</u>, only grapes (not other types of "tree" fruit) need to be redeemed in the fourth year of their growth in order to eat them.

NOTE We are lenient in using commercially grown grapes due to doubt as to the grapevines' ages.

#### Orla: Papayas in Eretz Yisrael

Papayas grown in *Eretz Yisrael* may not be usable, since papaya trees don't normally live for four years.

NOTE There is a difference of opinion as to the blessing over eating papaya—<u>borei pri ha'eitz</u> or <u>borei pri ha'adama</u>.)

# FIRSTS (REISHIT)

# **INTRODUCTION TO FIRSTS (REISHIT)**

#### **Introduction to Firsts (Reishit)**

Jews thank God for His blessings by giving Him the "first" (<u>reishit</u>) of various products (as well as a tenth/ *ma'aser* of agricultural and other wealth).

"First" applies to:

- First-Born/Petter Rechem
  - First-born male children/<u>petter rechem</u> (redeemed with money; see Introduction to <u>Pidyon</u> <u>HaBein</u>).
  - First-born male *kosher* domestic animals (calf, lamb, kid)/petter rechem (in Temple times: sacrificed on altar; now, permanent holy status--see Selling Mother Animal before Birth of Petter Rechem.
  - First-born male donkeys/<u>petter rechem chamor</u> (redeemed with sheep/goat; holiness of both the donkey and the sheep or goat then disappears).
- Dough/Challa

In Temple times, given to cohen; now, see When To Separate Challa (Hafrashat Challa).

• First Fruits/Bikurim

In <u>Temple</u> times, the Jew (<u>man</u> or woman) brought the <u>bikurim</u> fruits to the area between altar and <u>Temple</u> building; only the <u>man</u> said the

• First Shearing/Reishit HaGeiz

Portion of sheep's wool (reishit\_ha'geiz) (given to cohen).

NOTE All of the above have holy status except for the wool and the human *petter rechem*.

# **REISHIT: KOSHER DOMESTIC ANIMALS**

## PETTER RECHEM

#### **Selling Mother Animal before Birth of Petter Rechem**

SITUATION The first-born male baby of a female *kosher* domestic mammal or of a female donkey, if completely owned by a Jew, is a *petter rechem* (which may not be used for any purpose).

Before the mother has her first baby, sell part of her to a non-Jew so the firstborn will not be wholly owned by a Jew and, if male, will not become a <u>petter rechem</u>. <u>Rabbinic</u> guidance is recommended!

**REISHIT: PIDYON HABEIN** 

TERUMA/MA'ASER

TERUMA/MA'ASER: WHICH PRODUCE TO SEPARATE

**TERUMA/MA'ASER: LOCATION** 

Teruma/Ma'aser: Location: Grown in Eretz Yisrael

Teruma and ma'aser laws only apply to produce grown in Eretz Yisrael.

TERUMA/MA'ASER: TYPES OF PLANTS

Teruma/Ma'aser: Types of Plants: Herbs

Separate teruma and ma'aser on herbs grown in Eretz Yisrael.

TERUMA/MA'ASER: OWNERSHIP

Teruma/Ma'aser: Ownership: Separating Hefkeir Produce

"Ownerless" (<u>hefkeir</u>) fruit does not require having <u>teruma</u> and <u>ma'aser</u> separated even after it has been brought into your house.

## Teruma/Ma'aser: Ownership: What Is Hefkeir Produce

*Halachically* ownerless (<u>hefkeir</u>) fruit is fruit that will not be collected or picked by or for the owner, whether the fruit is:

- Still on the tree or fallen on the ground.
- Growing on public grounds or privately owned property.

# **TERUMA/MA'ASER: QUANTITY**

Teruma/Ma'aser: Quantity: On How Much To Separate

Separate teruma and ma'aser on any amount of produce grown in Eretz Yisrael.

Teruma/Ma'aser: Quantity: How Much Is Teruma Gedola

<u>Teruma gedola</u> is 1/50th of the total food. But today, since the <u>cohen</u> does not eat it, we remove a smaller amount.

## TERUMA/MA'ASER: WHEN TO SEPARATE

Teruma/Ma'aser: When To Separate: Not on Shabbat

You may not separate teruma and ma'aser on Shabbat since it is "fixing" the food by making it usable.

Teruma/Ma'aser: When To Separate: Cooking Outside

SITUATION You cook, outside, fruit from a privately owned tree in *Eretz Yisrael*.

WHAT TO DO You must separate teruma and ma'aser if you bring the cooked fruit indoors.

TERUMA/MA'ASER: HOW TO SEPARATE

## PROCEDURE FOR SEPARATING TERUMOT AND MA'ASROT

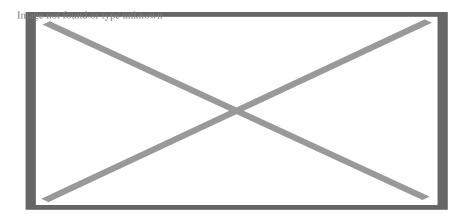
## **Procedure for Separating Terumot and Ma'asrot**

(from kashrus/kk-medi-terumos.htm">http://www.star-k.org/kashrus/kk-medi-terumos.htm, used with permission)

## Post this document in a conspicuous place.

NOTE The coin you are using for the separation must be in front of you (for the *ma'aser sheini*).

- 1. Break or cut off more than one hundredth of the food and set it aside (for teruma and terumat ma'aser).
- 2. Say the following (either in *Hebrew* or English):



Yoteir me'echad me'me'a she'yeish kahn harei hu teruma gedola be'tzad tzefono. Oto echad me'me'a she'yeish kahn ve'od tish'a chalakim k'moto be'tzad tzefono shel ha'peirot harei hu ma'aser rishon. Oto echad me'me'a she'asitiv ma'aser rishon asuy terumat ma'aser, uma'aser sheini b'dromo, u'mechulal hu ve'chumsho al peruta be'matbei'a sh'yichidita lechilul ma'aser sheini ve'revai. Ve'im tzarich ma'aser ani ye'hei ma'aser ani bi'dromo. Im hu revai ye'hei mechulal hu ve'chumsho al peruta be'matbei'a she'yichidita le'chilul ma'aser sheini ve'revai.

(Im ma'aser minim harbei tzarich le'hosif) "kol min al mino."

#### **Translation**

(If there is a food of one type that requires separation) Whatever is MORE than one hundredth of this food shall be *teruma* on the north side of the piece that I have set aside. The one hundredth that is left in the piece I have set aside plus nine other pieces the same size on the north side of the food shall be *ma'aser rishon*. That same one hundredth in the piece I set aside that I have made *ma'aser* shall be *terumat ma'aser*.

Furthermore, I am proclaiming <u>ma'aser sheini</u> to be in effect on the south side of the food, and I am redeeming it and its fifth on a <u>pruta</u> (smallest amount of money recognized by the <u>Torah</u> for most purposes) of this coin which I have in front of me. If this food needs <u>ma'aser ani</u>, the <u>ma'aser ani</u> shall take effect on the south side of the food.

If this food is subject to the laws of <u>neta revai</u> then it and its fifth shall be redeemed on a <u>pruta</u> of this coin that I have in front of me.

If there is a food of more than one type, add each type of food for its type.

- 3. Wrap the broken or cut-off piece in plastic and discard.
- 4. The coin-dime or coin of greater value-must eventually be disposed of in such a manner that it will not be used.
- 5. The food may now be eaten.

If you do not want to say the long version, you may say this shorter version, after having separated a piece larger than 1% of the total food:

All separations and redemptions shall take effect as is specified in this Star-K document outlining the Procedure for Separating *Terumot* and *Ma'asrot*, *Tithes* and Redemptions, which I have in my possession.

Whether saying the long or short version, only a little over one hundredth of the food will not be permitted to eat; all the rest may be eaten. Even though the *tithes* constitute over one fifth of the food, one is permitted to eat most of the *tithes* oneself, even though he may not be a *Cohen* or a *Levi*. Under no circumstances will it suffice merely to break off a piece of the food and throw it away. The aforementioned instructions must be strictly followed. The laws of the *tithes* apply to everyone, including the *Cohen* and *Levi*.

#### **IMPORTANT**

You must say the blessing <u>lehafrish trumot u'ma'asrot</u> if you know the produce definitely needed to have <u>teruma</u> and <u>ma'aser</u> taken; it was definitely:

- Grown on Jewish-owned land in halachic Eretz Yisrael and
- Had not yet had *teruma* and *ma'aser* taken from it.

BUT you must not say the blessing if the produce might have:

- Not been grown on Jewish-owned land in halachic Eretz Yisrael, OR
- Already had *teruma* and *ma'aser* separated.

NOTE The State of Israel is not the same as *halachic <u>Eretz Yisrael</u>* (that area of <u>Eretz Yisrael</u> owned or conquered by Jews during the Second *Temple* period).

#### More on Teruma/Ma'aser

For more on *teruma* and *ma'aser*, including a short form of the text, see kashrus/kk-medi-terumos.htm" target="\_blank">Star-K article

## Teruma/Ma'aser: Bal Tashchit

*Teruma* that is separated and destroyed is not considered to be a violation of <u>bal tashchit</u>, since it is done to fulfill a commandment/mitzva.

# **SHMITA**

## INTRODUCTION TO SHMITA

## **Introduction to Shmita**

Every seventh year, fruits, vegetables, grains, and legumes grown in <u>Eretz Yisrael</u> are subject to the laws of " *shmita*," which entail letting the land rest.

## **Holiness of Shmita Produce**

Fruits, vegetables, grains, legumes, etc., grown in <u>Eretz Yisrael</u> holiness. This holiness determines how we may treat fruit during *shmita*, including how to eat it and how to dispose of it.

# Which Produce Is Subject to Shmita Laws?

All fruits, vegetables, grains, and legumes that grow in <u>Eretz Yisrael</u> are subject to <u>shmita</u> laws. However, since there is a <u>rabbinic</u> decree that we may not eat vegetables and grains (called "<u>sfichin</u>") that grow in <u>Eretz Yisrael</u> during <u>shmita</u> year, we will mainly be discussing fruits.

NOTE Vegetables, grains, and legumes that are not raised in *halachic <u>Eretz Yisrael</u>* are never subject to *shmita* laws. So if a fruit or vegetable was grown outside the borders of Second *Temple* period <u>Eretz Yisrael</u>, you may eat that fruit or vegetable with no *shmita* concerns. Such areas may include much of the southern part of the State of Israel, including the Arava and southern Negev all the way to

Eilat, land south of Gaza, etc. Some people include the Golan. Many people also include any land currently "owned" by Arabs.

Plants grown off the ground or inside a house are also not subject to shmita.

## When Is Shmita?

The next *shmita* year will be observed beginning *Rosh Hashana*, September 2014.

## **SHMITA: FRUIT**

#### **Shmita: Fruit: Otzar Bet Din**

SITUATION You may not sell *shmita* fruit in the normal manner.

WHAT TO DO An <u>otzar bet din</u> can be set up to distribute fruit and pay the farmer for his work on distributing. The <u>otzar bet din</u> then distributes the fruit to the public and gets reimbursed for the expenses.

## **Shmita: Fruit: Who May Eat**

Shmita produce is ownerless and free for use by anyone.

#### **Shmita: Fruit: How To Eat**

You may eat fruit of the shmita year in Eretz Yisrael, but only in the normal way for eating that fruit.

## **Shmita: Fruit: How To Dispose Of**

You may not put *shmita* peels, cores, and other waste parts into the garbage (unlike *teruma*, you may not double-bag them and put them in the garbage). You must put them aside to rot before disposal.

#### **Shmita: Canned Fruit from Eretz Yisrael**

You may not buy canned fruit or other produce from <u>Eretz Yisrael</u> (even in later years) if the produce grew during a *shmita* year (except through an *otzar bet din*). This may be a problem with exports from Israel.

## SHMITA: GRAIN AND VEGETABLES

## Shmita: Grain and Vegetables: Benefiting From

You may not use grain and vegetables grown in <u>Eretz Yisrael</u> from a <u>shmita</u> year in any way (and no benefit may be derived from them).

## **SHMITA: PLANTS**

# Watering the Ground during Shmita

In Eretz Yisrael, you may not pour water on the ground during a shmita year if plants will benefit.

## **Spitting Seeds During Shmita**

In Eretz Yisrael, you may spit seeds on the ground during a shmita year as long as they are inedible.

## SHMITA: WINE

## **Buying and Using Shmita Wine**

You may not buy wine from grapes grown in <u>Eretz Yisrael</u> during a <u>shmita</u> year unless you buy it from an *otzar bet din*. Even if you do buy from an *otzar bet din*, it is not recommended to buy <u>shmita</u> wine since you:

- May not waste even one drop,
- Must use it only in the normal way, and
- May not dispose of the residue in the bottle until it has become unpotable.

## **YASHAN**

## INTRODUCTION TO YASHAN

#### **Introduction to Yashan**

Only <u>yashan</u> grain should be used. <u>Yashan</u> means one of the <u>Five Grains</u> that was planted at least three days before <u>Passover</u> and has now passed the first day of <u>chol ha'moed</u> of <u>Passover</u>. Grain planted after one <u>Passover</u> that has not passed the first day of <u>chol ha'moed</u> of the following <u>Passover</u> is known as "chadash."

## **Grains Subject to Yashan**

Wheat, barley, oats, rye, and spelt are subject to yashan.

#### Where Yashan Applies

Yashan applies to grain grown anywhere in the world.

NOTE Although *yashan* is from the *Torah*, some people outside of *Eretz Yisrael* are lenient about *yashan* with regard to grain that was grown outside of *Eretz Yisrael*.

# YASHAN: HALACHOT

#### **When Grain Becomes Yashan**

You may use grain as "yashan" after the first day of <u>chol ha'moed Passover</u>. "After" means the third day of <u>Passover</u> in <u>Eretz Yisrael</u> and the fourth day outside of <u>Eretz Yisrael</u>.

#### **Yashan and Matza**

Matza is normally made from winter wheat and so does not normally have a question of being chadash.

## FRUIT TREES: SPECIAL LAWS

## FRUIT TREES: BLESSING OVER BLOSSOMS

# When To Say Blessing over New Fruit Blossoms

The first time each year that you see blossoms on an edible-fruit tree, say the blessing "<u>shelo chisar ba'olamo davar</u>...." It may be anytime throughout the year, not only in <u>Nisan</u>. If you live in a region in which fruit trees blossom all year round, you should say "<u>shelo chisar</u>"... in <u>Nisan</u> after you see some new blossoms.

NOTE You may say the blessing on a single tree, even though the blessing says "trees" (plural).

## FRUIT TREES: REMOVING

## **Laws on Removal of Fruit Tree**

You may not remove a fruit tree that is still producing fruit, even

- For lumber,
- If the tree is diseased,
- If a replacement tree would yield more fruit.

EXCEPTION A fruit tree may be uprooted or cut down if it is not producing at least 46 oz. (2 lbs., 14 oz.--about 1.3 kg) of fruit each year.

#### **Removal of Productive Fruit Tree**

To remove from your property a fruit tree that produces at least 46 oz. of fruit each year, you must sell the tree to a non-Jew. The non-Jew may then remove it.