

Daf Ditty Pesachim 39: Maror as *Hirduf* or Mad Honey?



Rhododaphne Oleander

OLEANDER (Heb. הַרְדוּפִי mishnaic (*harduf*) or הַרְדוּפְנִי (*hirdufeni*)), the evergreen shrub with rose-colored flowers that grows wild in Israel on the banks of rivers.

Cultivated varieties having flowers of various colors are also grown. Its leaves are arranged at the nodes of the stalk in groups of three. In this respect it resembles the three-leaved myrtle. The Talmud (Suk. 32b) raises the possibility that by *ez avot* ("plaited tree"), one of the four species taken on the Feast of Tabernacles (Lev. 23:40), the oleander may be intended, but the suggestion is rejected on the grounds that the Bible would not have required a plant containing a dangerous poison to be taken (see Rashi, Suk. 32b). A fowl that has eaten oleander "is forbidden because of danger to life" (Ḥul. 3:5). It is, in fact, very poisonous and its ground leaves are sometimes used as mouse poison. One *tanna* held that it was because of its bitterness that this tree was used by Moses to sweeten the bitter waters (Ex. 15:25) "*for God heals with that with which he wounds*" (Ex. R. 50:3).¹ The Talmud (Pes. 39a) mentions a bitter plant called *hardufenin* which

¹ See Ex Rabba below

is not poisonous and was eaten as a salad. The reference is apparently to the *Scorzonera*, to which the name *hardufenin* is given in modern Hebrew. (*Scorzonera hispanica*, **black salsify** or **Spanish salsify**, also known as **black oyster plant**, **serpent root**, **viper's herb**, **viper's grass** or simply **scorzonera**, is a perennial member of the genus *Scorzonera* in the sunflower family (Asteraceae), cultivated as a root vegetable in the same way as purple salsify (*Tragopogon porrifolius*), also in the sunflower family.

מתני' *ואלו ירקות שאדם יוצא בהן ידי
חובתו בפסח בחזרת בתמכא ובהרחבינא
ובעולשין ובמרור *יוצאין בהן בין לחין בין
יבשין אבל לא כבושין ולא שלוקין ולא
מבושלין ומצטרפין לכוית ויוצאין בקלה
שלהן ובדמאי ובמעשר ראשון שנמלה
תרומתו ומעשר שני והקדש שנפדו : גמ'
חזרת חסא עולשין הינדבי תמכא אמר רבה
בר בר תנה תמכתא שמה הרהבינא אמר
רשב"ל אצוותא דדיקלא ובמרור מרירתא
תני בר קפרא אלו ירקות שאדם יוצא בהן
ידי חובתו בפסח בעולשין ובתמכא בהרחלין
בהרחבינן ובהורין רב יהודה אומר אף עולשי
שדה ועולשי גינה וחזרת עולשי גינה וחזרת
הא תנא לה רישא הכי קאמר אף עולשי
שדה כעולשי גינה וחזרת רבי מאיר אומר



משנה the זאגט:

- ואלו ירקות שאדם יוצא בהן ידי חובתו בפסח

The following vegetables can be used for the מצוה of מרור on פסח:

- חזרת, תמכא, הרחבינא, עולשין, מרור

- ומצטרפין לכזית

The different מינים can be combined with each other to make up a מרור of כזית.

- ויוצאין בקלח שלהן

We can use the stalks as well.

מתני' ואלו ירקות שאדם יוצא בהן ידי חובתו בפסח: בחזרת, בתמכא, ובחרחבינא ובעולשין ובמרור. יוצאין בהן בין לחין בין יבשין, אבל לא כבושין ולא שלוקין ולא מבושלין.

MISHNA: And these are the vegetables with which a person can fulfill his obligation to eat bitter herbs on Passover: One can fulfill his obligation with *hazeret*, with chervil [*tamkha*], and with field eryngo [*harhavina*], and with endives [*olashin*], and with *maror*. One fulfills his

obligation with them whether they are **fresh** or **whether** they are **dry**. **However**, one does **not** fulfill his obligation if they are **pickled** in water or vinegar, **nor** if they are **over-boiled** [*shaluk*] in hot water, **nor** if they are **boiled** [*mevushal*].

וּמְצַטְרְפִין לְכֹזֵית, וְיוֹצְאִין בְּקֶלַח שְׁלֵהָן. וּבְדַמְאֵי, וּבְמַעְשֵׁר רֵאשׁוֹן שְׁנַטְלָה
תְּרוּמָתוֹ, וּמַעְשֵׁר שְׁנֵי וְהַקֹּדֶשׁ שְׁנַפְדּוֹ.

The mishna adds: **And** all these different types of vegetables **join together** to the measure of an **olive-bulk**, i.e., it is not necessary to eat this amount from one specific type of vegetable. **And one fulfills** his obligation by eating **their stalk**, as it is not necessary to eat the leaves. **And** one fulfills the obligation **with doubtfully tithed** produce, **with first-tithe** produce **whose teruma has been taken** and given to a priest, **and** with both **second-tithe** produce **and consecrated property** that were **redeemed**.

גְּמָ' חֲזֵרֵת — חָסָא. עוּלָשִׁין — הִינְדְבִי. תְּמַכָּא, אָמַר רַבָּה בַר בַּר חֲנָה:
תְּמַכְתָּא שְׁמָהּ. חֲרַחְבִּינָא, אָמַר רַבִּי שְׁמַעוֹן בֶּן לָקִישׁ: אֲצוּוּתָא דְדִיקְלָא.
וּבְמָרוֹר — מְרִירָתָא.

GEMARA: The Gemara identifies the plants mentioned by the mishna by their Aramaic names. *Hazeret* is lettuce. *Olashin* is called *hindevi*.

With regard to *tamkha*, Rabba bar bar Hana said: It is called *temakhta* in Aramaic. As for *harhavina*, Rabbi Shimon ben Lakish said: This is the plant that grows around the palm tree.

The mishna taught: **And with maror**. The Gemara explains: This is a plant called *merirata*.

תַּנִּי בַר קַפְרָא, אֵלּוּ יִרְקוֹת שְׂאֵדָם יוֹצֵא בְּהֵן יְדֵי חוֹבְתוֹ בַּפֶּסַח: בְּעוֹלְשֵׁין,
וּבְתַמְכָּא, בְּחֶרְחֶלִיּוֹ, בְּחֶרְחֶבִינִיּוֹ, וּבְחֶזְרִין. רַב יְהוּדָה אָמַר: אֵף עוֹלְשֵׁי שְׂדֵה
וְעוֹלְשֵׁי גִינָה וְחֶזְרֵת.

Bar Kappara teaches: These are the vegetables with which a person can fulfill his obligation to eat bitter herbs on Passover: With endives, chervil, *harhallin*, field eryngo, and *hazeret*. Rav Yehuda says: Also wild endives, garden endives, and *hazeret*.

עוֹלְשֵׁי גִינָה וְחֶזְרֵת? הָא תַּנָּא לֵה רִישָׁא! הֲכִי קֵאָמַר: אֵף עוֹלְשֵׁי שְׂדֵה
בְּעוֹלְשֵׁי גִינָה וְחֶזְרֵת. רַבִּי מֵאִיר אָמַר: אֵף עֶסוּס וְטוֹרָא וּמַר יְרוֹאָר. אָמַר
לֵיה רַבִּי יוֹסִי: עֶסוּס וְטוֹרָא אֶחָד הוּא. וּמַר — זֶה הוּא יְרוֹאָר.

The Gemara asks: Why does Rav Yehuda mention **garden endives and hazeret**? These were already **taught in the first clause**. The Gemara explains that **this is** what Rav Yehuda is **saying: Even wild endives are** equivalent to **garden endives and hazeret** and may be used as bitter herbs on Passover. **Rabbi Meir says:** The plants *asvas*, and *tura*, and sweet myrrh [*mar yero'ar*] can also be used to fulfill this obligation. **Rabbi Yosei said to him:** *Asvas* and *tura* are two names for one plant, and *mar* is the same plant as *yero'ar*.

תַּנִּי דְּבִי (רַבִּי) שְׁמוּאֵל: אֵלּוּ יִרְקוֹת שְׂאֵדָם יוֹצֵא בְּהֵן יְדֵי חוֹבְתוֹ בַּפֶּסַח:
בְּחֶזְרֵת, בְּעוֹלְשֵׁין, וּבְתַמְכָּא, וּבְחֶרְחֶבִינִיּוֹ, וּבְחֶרְגִינִיּוֹ, וּבְהֶרְדוּפִנִיּוֹ. רַבִּי יְהוּדָה
אָמַר: אֵף חֶזְרֵת יוֹלִין וְחֶזְרֵת גְּלִין כִּיּוֹצֵא בְּהֵן.

A Sage of the school of Rabbi Samuel teaches: These are the vegetables with which a person can fulfill his obligation to eat bitter herbs on Passover: With *hazeret*, endives, chervil, field eryngo, *harginnin*, and *hardofannin*. Rabbi Yehuda says: One can also fulfill his obligation with *hazeret yolin* and *hazeret gallin*, as they are similar to the aforementioned vegetables.

הִירְדוּף (חֲרִדוּף) m. *hirduf*, a shrub or tree with bitter and stinging leaves, supposed to be *rhododaphne*, *oleander* (v. P. Sm. 1050 הִירְדוּף; Löw Pfl. p. 130). Succ. 32^b וְאִימָא דִּירָ (Ms. M. 2 וְ, v. Rabb. D. S. a. l. note 8) but might not *hirduf* be meant (by *ets aboth*, Lev. XXIII, 40)? —Pes. 39^a וְאִימָא דִּירָ might not *h.* be meant (by *m'rorim*, Ex. XII, 8)?

RASHI²

הִירְדוּפִין - יֵשׁ מִפְרָשִׁין אֱלוֹשֵׁנִ"א (לְעֵנָה) :

רַבִּי אֵילְעָא אָמַר מְשׁוּם רַבִּי אֱלִיעֶזֶר: אִף עֲרַקְבָּלִים, וְחִזְרְתִּי עַל כָּל תַּלְמִידָיו
וּבִקְשָׁתִי לִי חֵבֵר, וְלֹא מָצָאתִי. וּכְשָׁבַאתִי לְפָנֵי רַבִּי אֱלִיעֶזֶר בֶּן יַעֲקֹב, הוֹדָה
לְדַבְרִי.

Rabbi Ile'a said in the name of Rabbi Eliezer: One can also fulfill his obligation with *arkablim*. **And I went around all of Rabbi Eliezer's students looking for a colleague** who agreed with me that Rabbi Eliezer said this, **but I did not find** anyone who remembered this ruling. **But when I came before Rabbi Eliezer ben Ya'akov, he conceded to my statement.**

² In "*Flora in Rabbinic Literature: Questionable Identifications by Rashi*", Abraham Ofir Shemesh studies several questionable identifications of botanic terms by Rashi. For example, Rashi seems to have identified the talmudic "*hirduf*" with ruscus, which is common in Europe, although from rabbinic descriptions it seems to be the oleandrum, a Mediterranean chorotype. Another example is Rashi's identification of the talmudic "armon" with the chestnut, a common edible plant in Europe which did not grow in Israel in ancient times.



After identifying each of these vegetables the גמרא quotes a series of ברייתות that add other vegetables.

As a rule, ר' יהודה says;

- כל שיש לו שרף

Any vegetable that has sap can be used as מרור.

ר' יוחנן בן ברוקה says;

- כל שפניו מכסיפין

Any vegetable that is pale green can be used as מרור.

אחרים hold that it needs to have both qualities of sap and a pale green appearance.

הלכה כאחרים Paskens רב הונא.

רבי יהודה אומר: כל שיש לו שרף. רבי יוחנן בן ברוקה אומר: כל שפניו מכסיפין. אחרים אומרים: [כל] ירק מר יש לו שרף ופניו מכסיפין. אמר רבי יוחנן: מדברי כולן נלמד, ירק מר יש לו שרף ופניו מכסיפין. אמר רב הונא: הלכה כאחרים.

Rabbi Yehuda says: Any plant that has white sap when it is cut may be used as bitter herbs.

Rabbi Yoḥanan ben Beroka says: Anything whose surface is light green may be used as bitter herbs. *Aḥerim* say: Any bitter herb that has sap and whose surface is light green is fit for this mitzva.

Rabbi Yoḥanan said: From the statements of all these Sages, we can learn that a bitter green herb has sap and its surface is light green.

Rav Huna said: The *halakha* is in accordance with the opinion of *Aḥerim*.



רב אחא בריה דרבא originally tried to use the vegetable the משנה calls מרור, but changed his mind once he heard that the משנה prefers חסה - lettuce as the ideal vegetable to use for מרור, since its name alludes to חס רחמנא עלן - Hashem has on רחמנות כלל ישראל. It also has the character of being - תחילתו רך וסופו קשה - Starts off soft and become increasingly harsher, just like the servitude in מצרים.

רַבִּינָא אֲשַׁכְחִיה לְרַב אַחָא בְרִיה דְרַבָּא דְהוּה מְהִדֵּר אֲמַרְיָתָא. אָמַר לֵיה: מַאי דַעְתִּיד, דְמַרְיָרִין טְפִי? וְהָא חֲזַרְתָּ תְנִן. וְתַנָּא דְבֵי שְׁמוּאֵל: חֲזַרְתָּ, וְאָמַר רַבִּי אוֹשְׁעִיא: מִצָּוָה בְחֲזַרְתָּ. וְאָמַר רַבָּא: מַאי חֲזַרְתָּ — חֶסֶא.

Ravina found Rav Aḥa, son of Rava, searching for *merirata* to use as bitter herbs. He said to him: What is your opinion, that you seek this particular herb? If you are looking for that which is most bitter, but we learned *hazeret* first in the mishna, which indicates that this is the preferred choice. And likewise, a Sage of the school of Shmuel taught *hazeret* first, before the other types of bitter herbs.

And Rabbi Oshaya said: The optimal fulfillment of the mitzva is with *hazeret*, and Rava said: What is *hazeret*? It is lettuce [*hassa*].

מַאי חֶסֶא — דְחַס רַחֲמָנָא עֵילוּן. וְאָמַר רַבִּי שְׁמוּאֵל בַּר נַחֲמָנִי אָמַר רַבִּי יוֹנָתָן: לָמָּה נִמְשְׁלוּ מִצְרַיִם כְּמָרֹר? לֹאמַר לָךְ: מָה מָרֹר זֶה שְׁתַּחֲלִיתוּ רַךְ וְסוֹפוֹ קָשָׁה — אִף מִצְרַיִם תַּחֲלִיתוּ רַכָּה וְסוֹפוֹ קָשָׁה. אָמַר לֵיה: הִדְרִי בִי.

The Gemara explains: What is the meaning of lettuce [*hassa*]? It refers to the fact that God has mercy [*has*] on us. And Rabbi Samuel bar Nahmani said that Rabbi Yoḥanan said: Why are the Egyptians likened to bitter herbs in the verse:

וַיִּמְרְרוּ אֶת-חַיֵּיהֶם בַּעֲבֹדָה קָשָׁה, יַד בְּחֹמֶר וּבִלְבָנִים, וּבְכָל-עֲבֹדָה, בַּשָּׂדֶה--אֶת, כָּל-עֲבֹדָתָם, אֲשֶׁר-עָבְדוּ בָהֶם, בְּפָרֹךְ. 14 And they made their lives bitter with hard service, in mortar and in brick, and in all manner of service in the field; in all their service, wherein they made them serve with rigour.

Ex 1:14

“*And they embittered their lives*” This comparison serves to tell you that just as these bitter herbs are soft at first and harsh in the end, so too, the Egyptians were soft at first, when they paid the Jews for their work, but were harsh in the end, as they enslaved them.

This idea applies solely to *hazeret*, which has a bitter aftertaste, but not to other types of bitter herbs, which are bitter from the beginning.

Rav Aḥa, son of Rava, said to Ravina: I retract my position and concede that it is preferable to use *hazeret* for bitter herbs.

Summary

Rav Avrohom Adler writes:³

1. The mitzvah of maror is fulfilled by eating lettuce, horseradish, endives, or other bitter herbs. The Mishna tells us that when the Torah states that there is a mitzvah to eat “maror” on Pesach, it is not limiting itself to a specific vegetable named “maror” (although there was a vegetable with this name, as mentioned in the Mishna). Many other bitter herbs can also be used to fulfill this mitzvah. (39a)

2. The vegetables used for the mitzvah of maror can be fresh or dried (see below), but may not be pickled or cooked in any fashion. The Gemora explains that the stalks of these vegetables can indeed be eaten fresh or dried. However, the leaves can only be eaten fresh. The reason for this law, and the law that it cannot be pickled or cooked in any fashion, is that this causes the maror to lose its bitterness (see Insight below). (39a)

3. It is a special mitzvah to use lettuce for the mitzvah of maror (if possible). The Gemora states that it is a special mitzvah to use lettuce for maror. Lettuce is indicative of the slavery of Egypt, which was originally soft and then became hard. Similarly, it is originally sweet and then becomes bitter (see Insight below). Additionally, the Aramaic word for lettuce is “chasa” that hints that “chas Rachmana a’lan” – “Hashem had mercy on us.”

Bitter Lettuce

After reading the Gemora’s classification of maror, one might wonder how we fulfill the mitzvah of maror with lettuce. After all, if maror requires lettuce to be bitter, how can we fulfill the mitzvah with lettuce that is not really bitter?

אלו ירקות שיוצא בהם ידי חובתו חזרת עולשין תמכ' חרחביני' (פי' מיני עשבים מרים) מרור ויוצאי' בעלין שלהן ובקלחן אבל לא בשורש אלא שבעלין אין יוצאין אא"כ הם לחים ובקלחים יוצאין בין לחים בין יבשים אבל לא כבושים ולא שלוקים ולא מבושלים וכולם מצטרפין לכזית שהוא השיעור שלהם ועיקר המצוה בחזרת ואם אין לו חזרת יחזיר אחר ראשון ראשון כפי הסדר שהם שנויים: הגה ואם אין לו אחד מאלו הירקות יקח לענה או שאר ירק מר (אגור) וחרוסת יעשה עב זכר לטיט ואח"כ נותנין בו מעט חומץ או יין אדום זכר לדם (טור) ועושין חרוסת מפירות שנמשלו בהם ישראל (תוס' פ' ע"פ) כגון תפוחים תאנים אגוזים רימונים שקדים ונותנין עליו תבלין כגון קנמון וזנגביל הדומין לתבן שהיו מגבלין בו הטיט: (טור)

³ http://dafnotes.com/wp-content/uploads/2016/04/Pesachim_39.pdf

The Beis Yosef (Orach Chaim 473) above, indeed notes that the Rambam, who does not codify that it is a special mitzvah to use lettuce, may have understood our Gemora as saying that it is also a fulfillment of the mitzvah to use lettuce, even though when we eat it, it has not yet turned bitter.

It is said in the name of the Chazon Ish that he held that one should specifically have maror that is bitter. However, the Shulchan Aruch (ibid. 473:5), and almost all other poskim, and the overwhelming custom is to rule that it is a special mitzvah to eat lettuce.

They understand that as long as we do not change something to lose its bitterness (i.e., pickle or cook), as long as it is known to be naturally bitter at a certain stage, this is fulfilling the Torah commandment of maror.

I have a friend who was thinking of making special lettuce that would be bitter even in the beginning of its growth and also when it is consumed. He asked various poskim whether it is appropriate to make such lettuce, which could then be eaten even according to the Chazon Ish. I heard that he received different responses from great poskim about this question. He asked me to ask this question to Dayan Yisrael Yaakov Fisher zt"l of the Eidah Chareidis. Dayan Fisher told me that there is no need for such a stringency, and the custom is clearly to be lenient.

When our ancestors in Egypt were commanded (*Ex* 12:8) to eat the meat of the *korban pesach* together with matzah and *maror* (bitterness), no details were given about the nature of the bitterness. Rabbi Rachumi therefore asked the Sage Abaye how we know that the intention was bitter herbs. He even suggested the following things which are bitter, only to have Abaye explain why they did not qualify:

1) **The bile of a fish** – Since the Torah mentioned matzah and *maror* in the same passage, there is a suggested equation. Just as matzah is made from something that grows from the earth, so must *maror* be something that grows from the earth.

2) ***Hirduf* - the bitter wood of a tree (which Moshe used {*Ex* 15:25} in miraculous fashion to make the bitter waters of Marah drinkable for his people.)**

מִכָּה הוּא מְרַפָּא, שְׁנֵאמַר (שמות טו, כג): וַיִּבְאוּ מִרְתָּה וְלֹא יָכְלוּ לִשְׁתֹּת מִיָּם
מִמֶּרְהָ, לָמָּה, כִּי מָרִים הֵם, אָמַר רַבִּי לְוֵי הַדּוֹר הָיָה מֵר בְּמַעֲשָׂיו, (שמות טו,
כה): וַיִּצְעַק אֶל ה' וַיֹּרְהוּ ה' עֵץ, וּמָה הָיָה, וַיֵּשׂ אוֹמְרִים זֵית, וַיֵּשׂ אוֹמְרִים
עֲרֵבָה, וַיֵּשׂ אוֹמְרִים הַרְדּוּפְנֵי הָיָה, וַיֵּשׂ אוֹמְרִים עֲקָרֵי תְּאֵנִים וְעֲקָרֵי רְמוֹנִים

Ex Rabba: 50:3

Just as matzah is made from grain that must be repeatedly planted, so must *maror* be from vegetables, not trees.

3) ***Harzifa* - a vegetable which is poisonous for animals.**

Just as matzah is edible food that can be purchased in Yerushalayim with the funds that redeemed *ma'aser sheini* (second tithe), so must *maror* be something that can be purchased from these funds and *harzifa* is not something which people eat.

Tosefot points out that in regard to the above species, which is poisonous to animals, the *gemara* could also have disqualified it for use as fulfillment of the mitzvah for the same reason the *gemara* (*Mesechta Succah* 32b) disqualifies it for use as one of the four species we are commanded to take on Succot – that “the ways of Torah are pleasant” and would not require us to use something of a poisonous nature.

COMBINING DIFFERENT TYPES OF MAROR

Rav Mordechai Kornfeld writes:⁴

The Mishnah lists a number of different types of vegetables which one may use for the Mitzvah of Maror. The Mishnah concludes that small amounts of different vegetables may be combined to make a k'Zayis of Maror. The Mishnah continues and says that vegetables of Demai, Ma'aser Rishon from which Terumah has been separated, and Ma'aser Sheni and Hekdesh which were redeemed, may be used for Maror.

The Mishnah earlier (35a) lists five types of grain that may be used for Matzah. However, the Mishnah there does not mention, as the Mishnah here does, that different types may be combined to make a complete Shi'ur. Why does the Mishnah there omit this law?

BARTENURA writes that when the Mishnah here says that different vegetables join to make a Shi'ur, it also refers to the Mishnah earlier that lists the different types of grain that may be used for Matzah.

This answer is difficult. The Mishnah earlier mentions the Halachah of using Matzah, which is Ma'aser Sheni, even though the Mishnah here mentions the same Halachah with regard to Maror. According to the Bartenura, the Mishnah earlier should either omit both Halachos (and rely on the Mishnah here), or it should mention both Halachos.

Perhaps the Bartenura means that it is *obvious* that the different types of grain may be combined to make a complete a Shi'ur. The Mishnah here mentions that different types of vegetables may be combined for Maror *only* because it wants to teach that a person must eat a total Shi'ur of a k'Zayis of Maror. Since the Torah does not mention the word "Achilah" with regard to Maror, we might have thought that one is not required to eat a k'Zayis of Maror. The Mishnah therefore teaches that one *is* required to eat a k'Zayis of Maror.⁵ In contrast, with regard to Matzah, the Torah explicitly uses the word "Achilah," and thus it is obvious that one must eat a k'Zayis.

⁴ <https://dafyomi.co.il/pesachim/insites/ps-dt-039.htm>

⁵ The **ROSH** (10:25) writes that one must eat a k'Zayis of Maror because he recites the blessing, "Al *Achilas* Maror," and "Achilah" is defined as a k'Zayis.

RAN writes that it is not necessary for the Mishnah to teach that different types of grain may be combined to make a Shi'ur of Matzah. It is necessary, however, to teach this law with regard to Maror. Since the purpose of eating Maror is to taste the bitterness of the vegetable, and each type of vegetable has its unique taste, we might have thought that different types do not combine. The Mishnah therefore teaches that they do combine.

RASHASH suggests that if the Mishnah earlier would have said that the five grains combine to make a k'Zayis, we might have thought that *only* those types combine. The **Yerushalmi** states that even Orez (rice) and Dochen (millet) combine with the other five types of grain to make a k'Zayis, as long as most of the k'Zayis is comprised of one of the five grains mentioned in the Mishnah. For this reason, the Mishnah there omits specific mention that the five types of grain combine to make a Shi'ur.

SEFAS EMES offers a novel explanation. He suggests that these words of the Mishnah do not mean that the different types of vegetables may be combined to make a Shi'ur of Maror. Rather, they refer to the Mishnah's previous statement, that certain vegetables may *not* be used for Maror, such as vegetables that were pickled (preserved in vinegar) or cooked. The Mishnah now adds that although those vegetables may not be used by themselves for Maror, they *may* be combined with acceptable types of Maror to make a Shi'ur.

The logic for this Halachah is as follows. The reason why one may not use cooked vegetables for Maror is because they lose their bitter taste as a result of being cooked. However, when a cooked vegetable is combined with a vegetable valid for use as Maror, the bitter taste (of the raw vegetable) is present in the mixture. The Sefas Emes speculates that although one must eat a k'Zayis of Maror to fulfill the Mitzvah, perhaps the bitter taste does not have to emanate from the entire k'Zayis of the Maror.

The Sefas Emes concludes that this is a very novel interpretation of the Mishnah, and the Halachah might not follow this interpretation. It seems more logical to explain that the reason a cooked vegetable is not valid for Maror is because it simply is not considered Maror at all, and not because it loses its bitter taste. (*Cooked Matzah is also not valid, even though there is no taste requirement with regard to Matzah.*)

THE TYPE OF MAROR ONE MUST USE TO FULFILL THE MITZVAH

The Mishnah states, "*These are the vegetables with which a person fulfills his obligation [to eat Maror] on Pesach: Chazeres, Tamcha, Charchavina, Ulshin, and Maror.*" The Gemara cites the opinion of Acherim that "*every bitter vegetable [with which one may fulfill the Mitzvah of Maror] emits a milk-like sap when cut, and the vegetable's color is whitish.*" Rav Huna says that the Halachah follows the opinion of Acherim.

The Gemara implies that any bitter vegetable (which meets the criteria of having a milk-like sap when cut and a pale color) is acceptable for use for the Mitzvah of Maror.

ח וקלו אֶת-הַבָּשָׂר, בַּלַּיְלָה הַזֶּה: צֵלִי-ח
אֵשׁ וּמִצּוֹת, עַל-מַרְרִים יֹאכְלֶהוּ. 8 And they shall eat the flesh in that night, roast with fire, an unleavened bread; with bitter herbs they shall eat it.

Ex 12:8

and unleavened cakes; with bitter herbs: Every bitter herb is called מרור, and He commanded them to eat bitters in commemoration of "And they embittered their lives" (Exod. 1:14). — [from Pes. 39a, 116b]

על מררים: כל עשב מר נקרא מרור. וציום לאכול מרור וזכר
לימררו את חייהם (שמות א יד):

RASHI (above) on Ex 12:8, indeed states that the word "Maror" in the Torah refers to "any bitter vegetable."

However, the **MAGEN AVRAHAM** (OC 473:15) and **REBBI AKIVA EIGER** (Sukah 13a) ask that the Gemara in Sukah (13a) contradicts this inference. The Gemara there states that one does not fulfill the Mitzvah with Maror that has a "*Shem Levai*" -- a modifying name, "*such-and-such Maror*." Only generic "Maror" may be used for the Mitzvah, for that is what is mentioned in the Torah. If one may use *any* bitter vegetable, it should make no difference what the Maror is called. Why does the Gemara in Sukah say that the Maror must not have a modifying name?

ME'IRI in Sukah (13a) explains that the Gemara here clearly sets forth an order of preference for what type of Maror one should use on Pesach. Chazeres is the first choice, either because it is the most bitter, or because its name alludes to the mercy that Hash-m showered upon the Jewish people when He took us out of Egypt.

The Gemara in Sukah does not mean that one does not fulfill his obligation at all with Maror that has a "*Shem Levai*." Rather, it means that *Chazeres* with a "*Shem Levai*" is not considered to be the choice type of Maror.⁶

It seems that there is a dispute among the Tana'im with regard to the types of Maror that one may use. The Tana of the Mishnah here implies that only the five species listed may be used. The Gemara in Sukah seems to follow the opinion of the Tana of the Mishnah here, who says that Maror must be a specific type of herb, the name of which is "Maror." If it has a "Shem Levai," it is no longer "Maror." In contrast, the Gemara here follows the opinion of Acherim that *any* bitter vegetable may be used for the Mitzvah of Maror.

HALACHAH: What type of Maror should one use for the Mitzvah?

The **RIF** and **RAMBAM** do not mention the opinion of Acherim. They quote only the five species listed in the Mishnah. It seems that they maintain that the Halachah follows the view of the Mishnah and not Acherim. The **SHULCHAN ARUCH** (OC 479:5) rules like this as well; he mentions only the five types of Maror and no more.

However, the Gemara here clearly states that the Halachah follows the opinion of Acherim. Why, then, do the Rif, Rambam, and Shulchan Aruch not mention that other types of bitter vegetables may be used?

⁶ **RASHI** in Sukah indeed explains that the Gemara there refers to a particular type of *Chazeres*. Tosfos there questions Rashi's basis for explaining that the Gemara refers to a type of *Chazeres*. Perhaps Rashi there understands the Gemara like the Me'iri.

1. The **BI'UR HALACHAH** writes that today we are not expert in what vegetables fall into the category of "bitter vegetables." Therefore, we do not use any vegetable other than those that are specifically mentioned in the Mishnah.

2. Perhaps the **RIF** and **RAMBAM** understand the Gemara differently. They understand that Acherim do not argue with the Mishnah. Rather, Acherim argue only with the opinions of Rabbi Yehudah and Rabbi Yochanan ben Berokah, cited immediately before theirs. Rabbi Yehudah says that anything that emits sap qualifies as Maror.

Rebbi Yochanan ben Berokah says that anything that has a whitish color qualifies as Maror. Acherim respond that those are *not* signs of Maror, because "all vegetables" have both of those signs. Rather, only the five types mentioned in the Mishnah may be used.

3. Some Rishonim *do* record the ruling of Acherim, such as the **MAHARAM CHALAVAH**. Perhaps the Rif and Rambam agree that the Halachah follows the opinion of Acherim. They understand that the Mishnah itself alludes to that opinion when it mentions the word "Maror" in the list of acceptable vegetables.

The word "Maror" refers not to a particular species of vegetable (as Rashi explains), but to *anything bitter* -- as the **RE'AH** (cited by the **RITVA**) and **ME'IRI** explain. Accordingly, when the Rif and Rambam quote the five types mentioned in the Mishnah, their list indeed includes *any* bitter vegetable, because that is the definition of "Maror."

The **REMA** explicitly writes that a person who does not have any of these five types may use any other type of Maror. The authorities agree that, b'Di'eved, if one does not have any of the five types mentioned in the Mishnah, he may use any bitter vegetable.

Vegetables That Can Count as Maror

Steinzaltz (OBM) writes:⁷

Aside from *hametz* and *matza* that we have been discussing, another one of the mitzvot of *Pesah* is eating *maror* – bitter herbs. The Mishna that opens **our daf** lists five types of vegetables that can be used to fulfill the *mitzva* of *maror*. It is commonly accepted that the first type listed, *hazeret*, is romaine lettuce. The Sages identify the second type, *tamkha*, as horseradish. Some hold that the fourth type, *olashin*, is endives. There is no firm tradition regarding the remaining two species – *harhavina* and *maror* – although the Me'iri claims that it is not the name of a specific plant, rather it includes all types of bitter vegetables.

According to the Gemara, the most preferred type is *hazeret* – romaine lettuce. Initially this is soft and sweet, but the longer it remains in the ground, the more bitter it becomes. This recalls the nature of the Egyptian servitude which was bearable at first, but became progressively worse as

⁷ <https://steinsaltz.org/daf/pesahim39/>

time went on. Furthermore, its name in Hebrew – *hassah* – reminds us of God’s mercy on the Jewish People in Egypt.

This leaf-lettuce, *Lactuca sativa var. Romana*, is grown commercially for food. Its leaves, which grow to a length of 35 cm. and a width of 15 cm., develop into a “head.” If the lettuce is allowed to grow undisturbed, it develops a long (up to one meter), hard stem, from which flowers and small, bitter leaves will sprout, probably the source for the Gemara’s comment that it starts out sweet, but ends up bitter. As noted, the identification of *hazeret* as horseradish is a common error.

One vegetable that is rejected by the Gemara as a possible type of *maror* is **oleander**, a shrub that grows to a height of four meters with hard yellow-green leaves and pink flowers. Aside from being bitter, the leaves and flowers of this plant are poisonous, and can kill animals and even people if eaten in large quantities.

Rachel Scheinerman writes:⁸

Writing about a lively Passover seder held by Union soldiers in the midst of the Civil War, J.A. Joel of the 23rd Ohio Volunteer Regiment delighted in describing what this remarkable feast of freedom on a battlefield entailed. Thanks to “Yankee ingenuity,” the group imported matzah and haggadahs from Cincinnati to West Virginia, devoured an entire lamb (since they didn’t know which part was the shankbone), and substituted actual brick dust for *haroset*. And because no horseradish was available to serve as the bitter herb, the company dug up a local weed to serve the purpose. It turned out to be quite bitter, as Joel describes:

“The herb was very bitter and very fiery like Cayenne pepper, and excited our thirst to such a degree, that we forgot the law authorizing us to drink only four cups, and the consequence was we drank up all the cider. Those that drank the more freely became excited, and one thought he was Moses, another Aaron, and one had the audacity to call himself a Pharaoh. The consequence was a skirmish, with nobody hurt, only Moses, Aaron and Pharaoh, had to be carried to the camp, and there left in the arms of Morpheus.”

The catharsis this scrappy seder-turned-bar-fight offered to weary Union soldiers in the midst of a grueling war is palpable. The alternative bitter herb, an unknown weed growing in the wilds of West Virginia, was clearly a memorable highlight. But what would the Talmud say about this substitute *maror*?

Exodus 12:8 commands the Israelites to eat “bitter herbs” on Passover and the mishnah that begins today’s page lists specific species that are acceptable. (The Gemara later notes that more than one species is acceptable because the Torah refers to “bitter herbs” in the plural.) Even the Gemara is not entirely sure what all these species are, but let me offer some educated guesses with a bit of help from the translation available on Sefaria: lettuce, chervil, field eryngo, endives, and horseradish.

As the Gemara begins discussing this mishnah, several things become clear. The bitter herbs must be flora, not fauna (so the bile of the *kufya* fish, while bitter, does not fulfill one’s obligation in this

⁸ Myjewishlearning.com

regard). They must have sap and a light green or greyish color. They can be fresh or dried. And one can use leaf, stem or root. And while horseradish is considered the most bitter of the options, lettuce (*hazeret*) is actually the preferred species. This is not just because the mishnah lists it first:

And Rabbi Samuel bar Nahmani said that Rabbi Yohanan said: Why are the Egyptians likened to bitter herbs in the verse: “*And they embittered their lives*” (Exodus 1:14)? This comparison serves to tell you that just as these bitter herbs are soft at first and harsh in the end, so too, the Egyptians were soft at first (when they paid the Jews for their work) but were harsh in the end (when they enslaved them).

This teaching is brought as proof that lettuce, which initially tastes sweet but gives a bitter aftertaste, is in fact the preferred bitter herb to fulfill the obligation laid out in Exodus 12:8. Today, most people use horseradish, the most bitter option (though probably not as bitter as whatever those Union soldiers ate in West Virginia), though *hazeret* still has a place on the seder plate. But under no circumstances, the Gemara chides, may one pickle or boil the bitter taste completely out of the herb. One might argue this makes beet-pickled chrain a poor choice for the seder — though certainly a delicious condiment to enjoy throughout the holiday. One is not necessarily commanded to swallow something so bitter as those Union troops, but neither is one supposed to completely wimp out.



The commandment to eat bitter herbs comes straight from the Torah , where it says that we should eat the paschal sacrifice “roasted over fire with matzahs and *merorim*.” (Exodus 12:8) *Merorim* is the plural form of the word *maror*, which comes from the Hebrew root *mar*, meaning bitter. The Torah doesn’t specify why we should eat *maror*—most often translated as “bitter herbs”—but it’s commonly accepted that these herbs remind us of the bitterness of the lives of Israelites in Egypt.

Already in *our daf* the rabbis wrestled with the same questions you’re asking. What counts as a bitter herb? They came up with a list of qualifications for a vegetable that can be used as *maror*: It should be bitter, have sap, and be grayish in appearance. It also needs to be a vegetable that grows from the earth, not from a tree.

The Mishnah (Pesachim 2:6) lists five possibilities that can be used at the seder, but it's hard to know what contemporary plants they correspond to. The one that's most clear is called *hazeret* in the Mishnah, and *hasa* in the Gemara. *Hasa* is the contemporary Hebrew word for lettuce, and as a result, many halakhic authorities today say the best form of bitter herbs is romaine lettuce, which has a bitter aftertaste, even though it is not initially bitter. The outer older leaves of romaine lettuce can contain a grayish milky sap that is very bitter. Other commonly used vegetables are celery (somewhat bitter), endives (pretty bitter), and of course horseradish (both the purple kind, and root itself), also known as *chrein*. Personally, I think of horseradish as spicy, not bitter, but it's perfectly acceptable, so if you want to stick with the purple stuff you know, there's no problem with it.

Though it isn't explicit in the Torah, bitter herbs are commonly held to be a symbol of the bitterness the Israelites felt when they were slaves in Egypt. By eating the herbs we feel bitterness ourselves, and can more easily imagine ourselves as slaves. When we dip the maror in the haroset we are associating the bitterness we feel with the hard labor the Israelites experienced at the hands of the Egyptians.

Rav Moshe Taragin writes:⁹

Our daf lists 5 different types of vegetables that are suitable for the *mitzva* of *marror*. The common denominator is that all 5 provide a bitter taste which is the central feature of the *mitzva*. Typically, *mitzva* items do not require a particular taste; the *mitzva* food is identified based upon specific criteria and as long as the particular specimen is classified as that food, the precise taste is irrelevant. For example, wine can be sweeter or sourer, but as long as it is considered halakhic wine, it can be employed for *kiddush*. How inherent is the bitter taste in defining acceptable vegetables for *marror* use? Can any bitter produce satisfy the maror requirements or must a specific species be employed?

The *gemara* provides very different impressions about this issue. By listing 5 species, it would appear that the *mishna* intended VERY SPECIFIC items, to the exclusion of others. Interestingly, the *gemara* cites at least 6 different lists or partial lists offered by various *Tannaim* and *Amoraim*. If any bitter object would suffice, these lists would seem quite unnecessary. Subsequently, however, the *gemara* quotes three opinions which argue about the qualifications of *marror*. R. Yehuda allows any bitter vegetable which produces sap, while R. Yochanan ben Beroka allows any vegetable which turns red if it is cut. Finally, a position is cited in the name of "Acheirim" which demands both sap production and the reddening effect upon being cut. All three opinions seem to allow ANY bitter vegetable to serve as *marror* as long as certain "*marror*-like" effects exist.

Finally, the *gemara* suggests several other bitter items, such as bitter parts of fish or animals, bitter bushes (*hirduf*), and other items. The *gemara* rejects these options because *marror* is compared to *matza* and must therefore be produce (not an animal) that is edible. If *maror* were limited to specific species, why not simply reject these items because they are one of the 5 species listed? To conclude its discussion, the *gemara* questions the fact that there are actually 5 acceptable species. After all, the Torah employs a plural term, "*merorim*," which should indicate the possibility of

⁹ <https://www.etzion.org.il/en/5-marror-species>

only 2 species, not 5. The *gemara* responds that since *marror* is compared to *matza*, there are MANY species that are valid.

To summarize, it is difficult to infer from the *gemara*'s complex discussion whether any bitter¹⁰ vegetables may be employed for *marror* or only those mentioned on the list.

The Shulchan Arukh (473:5) lists the 5 species of the *mishna*, implying a limitation to these particular items. The Rama, however, cites the Agur, who adds that if these species cannot be located, any bitter vegetable can be employed. Recognizing the uncertainty surrounding the Rama's *kula*, the Magen Avraham suggests that a *berakha* should not be recited on anything other than the 5 listed species.

It seems that two very different versions of *marror* emerge. One suggests that the Torah mandates eating CERTAIN food items which are distinguished by a bitter taste, although the *mitzva* surrounds the ingestion of those ITEMS and not the experiencing of a bitter taste. The alternative model claims that the only requirement is to experience bitter taste (as long as basic comparisons to *matza* are maintained).

An interesting statement of the Chazon Ish may be analyzed in light of the aforementioned question. He claims (*Orach Chaim* 124) that the vegetable must currently be bitter to be used for fulfilling the *mitzva*. Eating a species which will BECOME bitter but is presently SWEET (our common practice with lettuce) would not fulfill the *mitzva*. Evidently, eating a particular species would not be sufficient without experiencing the bitter taste. According to the Chazon Ish, the bitter taste is necessary but not sufficient, while according to the Rama (who allowed eating any bitter item in the event that one of the 5 species could not be obtained), it may be sufficient. The Peri Chadash and the Arukh Ha-Shulchan argue with the Chazon Ish and explicitly permit lettuce which will ultimately become bitter, even though it currently tastes sweet.

An interesting discussion in the *gemara* may yield an extreme position based upon the aforementioned concept that any bitter vegetable may be eaten. **Our Daf** cites R. Ilya, who wanted to verify the use of *arkabalim* for *marror*. He tried in vain to find a colleague who would agree until he visited R. Eliezer ben Yaakov, who confirmed his position. It is unclear from the *gemara* why R. Ilya's suggestion was met with such unanimous rejection. The Ritva claims that *arkabalim* is not a vegetable, but part of a tree's bark, which is bitter. R. Ilya was effectively allowing a non-vegetable for use as *marror*. Although his position was roundly rejected, it DOES indicate a focus on the bitter taste and a lack of concern for a particular species. Even items which aren't vegetables may be used.

Clearly, R. Ilya's position was a minority one, and was ultimately rejected. Yet an ambiguous Rashi may have asserted the same notion. One of the 5 vegetable species mentioned by the *mishna* is *charchavina*. The *gemara* identifies this as "*atzvasa de-dikla*," which Rashi defines as the bark of a tree. Most *Rishonim* are incredulous that Rashi could have allowed the bark of a

¹⁰ In fact, many *Rishonim*, including Rabbenu Dovid, the Ritva, and the Me'iri, asserted this claim in their comments to the *gemara* in *Pesachim* 39a.

tree for *marror*. Keep in mind that Rashi is explaining the MAINSTREAM position of the *mishna* and not a minority opinion of R. Ilya. The *Rishonim* overwhelmingly reinterpret Rashi; they claim he intended small vegetables which grow in the vicinity of trees rather than the bark, which grows literally around a tree. Yet the simple reading of Rashi does suggest that he would allow any bitter substance, even if it isn't one of the 5 species and even if it isn't a vegetable at all.

This dovetails nicely with an interesting remark by Rashi in his commentary Ex 12:8. He writes that any bitter herb is called *marror*. Although Rashi was not writing in a halakhic vein in this context, his comments do indicate a willingness to validate anything bitter which grows from the ground, even if it isn't one of the listed species.

Perhaps the most extreme position is staked by the Peri Megadim. He wonders about a bitter item which is so bitter that it isn't edible and isn't considered halakhic food. It seems that the *gemara* already considered this option and rejected it. *The gemara suggests the use of "hirzifu," which Rashi identifies as poisonous seed.* It rejects this because *marror* - like *matza* - must be edible food. Presumably, this bans the use of non-edible food. Evidently, the Peri Megadim would distinguish between items that are completely inedible and those whose extreme bitterness renders them inedible.

If marror is merely a food with a bitter taste and not a particular species and not even a vegetable, it may also be extracted from something that isn't considered halakhic food. Of course, this is the most extreme position, but logically it seems to cohere with many previously stated positions.

Identifying the species eligible as "Maror"

ואימה הירדוף—דומיא דמצה ... מה מצה מין זרעים אף מרור מן
זרעים

Our Daf is in the process of identifying the species which is referred to as “מרור” (Ex 12:8) for fulfillment of the Torah’s mitzvah to consume it on Pesach.¹¹

The Mishnah and Baraisa provide an extensive list of vegetables which qualify for this mitzvah. Among them is horseradish, romaine lettuce, endives, palm ivy or succory.

The Gemara then suggests an additional species, hirduf—a piece of wood (possibly oleander bush, an evergreen shrub, the type thrown into the water at Marah by Moshe to miraculously sweeten the water)—for consideration as maror.

The Gemara rejects this, because we know that the verse associates maror and matzah, and just as matzah must be from vegetation (from the five major grains), so too must marror be from vegetation. *Oleander fails this test, as it is a piece of wood.*

¹¹ <https://www.dafdigest.org/masechtos/Pesachim%20039.pdf>

The Gemara then suggests that maror be hirduf—a leaf that is poisonous to animals. This, too, is rejected, because maror must be a species that can be purchased with ma'aser money, and hirduf is not designated as an edible food.

Tosafos cites the Gemara in Sukkah (32b) which analyzes the identity of “the braided branch” which is one of the four species for Sukkos. When the Gemara suggests **hirduf**, Abaye rejects it outright, as the verse says (Prov 3:17): נועם דרכי דרכיה—Its ways are ways of pleasantness.” Because this species is a poison for animals, it cannot possibly be that which the Torah wants us to use for a mitzvah item.

ומתוך פירושו משמע ד'הירדוף' היינו 'הרדופני' בפרק
אלו טרפות (חולין דף נח:) 'אחוזת דם והמעושנת
ושאכלה הרדופני' - שהוא סם המות לבהמה.

From his explanation it appears that 'Hirduf' is synonymous with 'Hirdufni' in Perek Eilu T'reifos (Chulin, Daf 58b) - 'Achuzas Dam, ve'ha'Me'ushenes ve'she'Achlah Hirdufni' - which is poison to animals ..

Tosafos above, asks, when the Gemara rejects hirduf, why does the Gemara reject it only due to the technical problem of its being a piece of wood? Why does our Gemara not point out that this is a poisonous item, and it therefore cannot possibly be the maror plant?

Tosafos explains that, indeed, our Gemara could have discounted hirduf from consideration due to its being poison, but the Gemara pointed out that there is yet another problem here as well, in that hirduf is a piece of wood, and not vegetation.

Tosafos haRosh notes that if this species is rejected to be taken as one of the four species on Sukkos due to its being poisonous, it is even more objectionable in our Gemara, where we are considering it to be eaten as maror.

Fulfilling the mitzvah of Maror with Chazeres

א"ר אושעיא מצוה בחזרת [יותר משאר סוגי מרור .]

R. Oshiya said: The mitzvah (1) (of maror) is with “chazeres” (lettuce --i.e. chazeres is the most preferred species with which to perform maror).

Our Daf (2) brings two reasons for this ruling. Ravah says because chazeres (lettuce) is called “chasah”. This word (chasah) relates closely to the word “chas” which means ‘had mercy’ – a reference to the divine mercy which Hashem showed us.

R. Shimon the son of Nachman said in the name of R. Yonasan the reason it is the most preferred is that its physical properties resemble the bitterness of Egypt, for it begins soft and winds up hard.

(Meaning3, at the beginning, chasah is soft without any sharpness to it. Eventually as it remains in the ground the stem becomes harder.)

The later authorities (4) infer from here, that the advantage of chasah is that it has these two qualities (namely, its phonetic relationship to the word chas as well as its similarity in physical character to the servitude in Egypt).

However, if the herbs were not in essence bitter (because they were harvested before becoming bitter) one would still fulfill his obligation with such maror.

The Chazon Ish (5), however, writes, that the essential aspect to the maror is indeed its bitterness. Therefore, he says, one should only use maror which tastes bitter. (However (6), one should make sure that the leaves don't remain in the ground to the point where they become overly bitter.) Nonetheless, all opinions agree that one should not use chasah (7) -lettuce- unless it is fully checked and bug-free.

1. וכתב בשו"ת חכם צבי סימן קי"ט שהוא הניקרא סאלא"ט, אן לטוגא. דהיינו הניקרא בעברית חסא (כלשון הגמ')
2. כדפרש"י בד"ה מצוה
3. הגר"ז באר"ח תע"ג ס"ל, וכן משמע כאן בפרש"י
4. בגר"ז הנ"ל, וכן עיי"ש בלבוש וב"י וערוך השולחן וכ"כ החיי אדם ועוד פוסקים
5. החזו"א קכ"ד על דף ל"ט א'
6. כ"כ שם. נודע שהשאגת אריה סימן ק' כתב שלדעת הרא"ש יוצא י"ח מרור בכל שהו. וא"צ כזית אלא לברכה דעל "אכילת מרור". ולדבריו אם אוכל גם כ"ש קריין מלבד הכזית חסא המתוק, יצא י"ח המצוה גם לחזו"א. אלא שהשאג"א גופיה חלק על הרא"ש. וע"ע בשע"ת בריש סימן תע"ה ובשע"צ ס"ק י"ב, ואכמ"ל
7. מ"ב תע"ג ס"ק מ"ב ■

“What’s the Truth about ... Using Horseradish for Maror”?

Rabbi Dr. Ari Zivotofsky writes:¹²

Misconception: Horseradish (*chrain*) is the preferred item to use to fulfill the mitzvah of eating *maror* at the Seder.

Fact: Among Ashkenazim, horseradish is widely used for *maror*. While horseradish often appears as the translation for *tamcha*, one of the vegetables listed in the Mishnah that may be used for *maror*, the translation is probably inaccurate.¹ Although horseradish is now considered acceptable for use at the Seder, according to many *posekim*, lettuce and endives are preferable.

Background: The Torah requires that the *korban Pesach*, both on Pesach (Ex. 12:8) and Pesach Sheni (Bamidbar 9:11), be eaten with matzah and *maror*. These days, in the absence of the Beit

¹² <https://jewishaction.com/religion/shabbat-holidays/passover/whats-truth-using-horseradish-maror/>

Hamikdash, we do not eat the *korban Pesach*, but there is still a rabbinic requirement for both men and women (*SA OC 472:14*) to eat *maror* on the Seder night.²

What is *maror*? The Mishnah (*Pesachim 2:6; 39a*) lists the following five types of vegetables that may be used as *maror*: *chazeret*, *ulshin*, *tamcha*, *charchavina* and *maror*.³ Because the identity of these Mishnaic terms is not clear, the Gemara provides further detail.

Heading the list, and presumably the preferred item (according to many authorities, the Mishnah lists these items in order of preference),⁴ is *chazeret*. The Gemara identifies this as *chasah*, the modern Hebrew word for lettuce, and there is little doubt that the Mishnaic *chazeret* is lettuce (*Lactuca sativa*). Lettuce is a winter plant in Israel and thus was and is readily available in time for Pesach. “Wild lettuce” (*Lactuca serriola*) neither looks nor tastes like the lettuce sold in American supermarkets. It consists of a central stalk with loose, prickly dark green leaves, and continues to grow wild in Israel. The lettuce is bitter, especially as it ages, and when its stalk is cut, it oozes a considerable amount of white, bitter sap. Early cultivated lettuce had this same sap. It might be worthwhile when visiting Israel to seek out some of the wild lettuce and sample its bitterness.

The second item, *ulshin*, translated as *hindvei*, is nearly universally understood to refer to endives.⁵ Next is *tamcha*, which the Gemara calls *temachta* and whose specific identity is uncertain.

Throughout Southern and Western Europe and the Mediterranean countries, lettuce, endives and similar vegetables were used for *maror*, and continue to be used today.

For the Jews in Northern and Eastern Europe this was not always an option. As Jews moved further north and east into the colder climates, it became increasingly difficult to acquire lettuce and other leafy vegetables in time for Passover.

In modern Hebrew, horseradish (*A Armoracia rusticana*) is called *chazeret*, the first term in the Mishnah’s list. While *tamcha*, the third item, is often translated in rabbinic literature as horseradish,⁶ it is fairly certain that this translation is inaccurate, because it is unlikely that horseradish existed in the Middle East in the Talmudic period. Furthermore, horseradish is sharp rather than bitter.⁷

Horseradish is first mentioned⁸ in rabbinic literature by Rabbi Eliezar ben Natan of Mainz (c.1090-c.1170) and the Rokeach, Rabbi Eliezer of Worms (c.1165-c.1230), both of whom refer to it not as *maror*, but as an ingredient in *charoset! Tosafot Yom Tov (Pesachim 2:6)* and *Hagahot Maimoniot (Chametz Umatzah 7:13)* were among the earliest works to identify *tamcha* as horseradish.

The fact that horseradish may not be found in the Mishnaic list does not necessarily preclude it from being used as *maror*. After all, it is uncertain whether the Mishnaic list is exhaustive; it may simply be illustrative. Indeed, the Gemara cites two *beraitot* each of which provides different lists of vegetables that can be used for *maror*. There are rabbinic opinions that state that only plants that were known as “*maror*” in the Biblical period—as attested by inclusion in

a *mishnah* or *beraita*—are acceptable as *maror*. According to those opinions, the lists found in the Mishnah and the *beraitot* are indeed exhaustive, and the only herbs acceptable for *maror* are those for which there exists an unbroken tradition (*mesoret*) identifying them as being part of the Mishnaic lists (see *SA Harav* 473:27; *MA OC* 473:15; *Chok Yaakov OC* 473:24; *Chayei Adam* 130:3). Ironically, many of these authorities who demand a *mesoret* are those who approve of horseradish for *maror* because they identify it with *tamcha*.

Other statements in the Gemara indicate that any pale green vegetable that oozes a milk-white liquid upon being cut is acceptable. Rashi (Ex. 12:8) writes that any bitter herb is called *maror*.⁹ The Gemara even asserts that were it not for a Scriptural exclusion, non-plants would be acceptable as *maror*. One of the items the Gemara suggests could have been used as *maror* is the gall bladder of the kufya fish, identified by Rabbeinu Chananel as the famous shibuta.¹⁰ Rema (*OC* 473:5) rules that in the absence of an acceptable vegetable, any bitter vegetable should be used, albeit without a *berachah* (*MB* 473:46).

Another concern with fulfilling the mitzvah of *maror* with horseradish is that the root is used. The Mishnah states (*Pesachim* 39a) that one should fulfill the obligation to eat *maror* with either the leaves or the stem of the plant; the *Shulchan Aruch* rules similarly, emphasizing “not the root” (*SA OC* 473:5). The irony, of course, is that in the colder northern climates where the Ashkenazim had migrated, horseradish was available precisely because it is a root plant—and not a leafy plant. Some authorities excluded only the small roots of plants but permitted the large ones (such as those used from horseradish for *maror*) by asserting that such roots are merely extensions of the stem.¹¹

Flying in the face of rabbinic opposition, the use of horseradish for *maror* continued to spread among the masses of Eastern European Jewry to the extent that by the eighteenth century it was being used even in places where leafy vegetables could be obtained. Some authorities, such as Rav Shlomo Ganzfried (1804-1886; *Kitzur Shulchan Aruch* 118:3), bemoaned this situation and advocated using lettuce when possible.

Rav Tzvi Ashkenazi (1660-1718; *Shu”t Chacham Tzvi* 119) provides a wonderful summary of this topic. He explains that horseradish came to be used for *maror* either because lettuce was not available in cold climates¹² or because those dwelling far from Israel lost the ability to identify the correct species of lettuce. He then laments the conundrum that this situation caused: Those who are not careful about keeping *mitzvot* do not fulfill their obligation to eat the required amount of *maror* because horseradish is too sharp, while those who try to be meticulous about keeping *mitzvot* eat the requisite amount¹³ and thereby endanger their health.¹⁴ He decries the fact that horseradish was even being used in parts of Germany and Amsterdam, where leafy vegetables are available during the spring.

That lettuce was the preferred choice was never forgotten among Eastern European Jewry, and thus customs developed wherein both vegetables were used. For example, some people would use lettuce for *maror* and horseradish for *korach*.¹⁵ It is reported that Rav Yosef Dov Soloveitchik would eat horseradish and then lettuce to fulfill the mitzvah of *maror*.

The ultimate legitimization of horseradish use came in 1822 when Rav Moshe Sofer wrote that horseradish may indeed be preferable to lettuce, but for an ancillary reason: It is difficult to clean the lettuce of bugs (*Chatam Sofer, OC:132*; cited in *Mishnah Berurah 473:42*). He wrote that it would be wrong to violate the Biblical prohibition against eating bugs in order to fulfill the rabbinic mitzvah of eating *maror*.

Others preferred horseradish over lettuce for another reason. They argued that there are various types of lettuce, and today we are unsure which type(s) the Mishnah refers to (Lewy, pp. 301 and 303). Thus, for example, Rabbi Yosef Eliyahu Henkin wrote in *Ezrat Torah Luach* that we can be confident that horseradish is indeed one of the five bitter herbs mentioned in the Mishnah but that there are doubts as to whether the various types of lettuce available today meet the criteria of the “lettuce”¹⁶ referred to in the Mishnah.

Dr. Ari Schaffer of the Volcani Institute for Agricultural Research in Israel insightfully points out that using horseradish for *maror* affords a double symbolism: the original meaning of the bitter bondage in Egypt and the additional reminder of our people’s long and distant wandering away from the land of the Bible and Mishnah, the Land of Israel.

Many people use horseradish simply because they are bothered by the lack of a bitter taste in lettuce. After all, the mitzvah of *maror* seems to be based on the fact that the Egyptians embittered (*vayemareru*) the lives of the Israelites (Ex 1:14). The Gemara (*Pesachim 39a*), also seemingly troubled by the preference for lettuce, explains that the word lettuce (in Hebrew), *chasah*, is similar to *chas*,¹⁷ to take pity, and that it reminds us that God took pity on the Jews in Egypt. The Gemara further explains that lettuce parallels the Egyptian experience. Just as lettuce starts out soft and then hardens as it ages, so too the Egyptian servitude began with soft words and ended harshly. (See *Torah Temimah*, Ex. 1:14, note 19.) The *Yerushalmi (Pesachim 2:5)* states this same idea in a slightly different way: *Chazeret* starts out sweet, and turns bitter as it grows. In either case, it is important that while eating the *maror* one remembers its associations. Rabban Gamliel’s famous statement (*Pesachim 10:5; 116b*) is read at the Seder so that all understand the significance of the *maror*.

The Gemara seems to have required that there be some bitterness and explains that that is why dried stalks are acceptable but dried leaves that lack a bitter taste are not. However the Beit Yosef (on Tur *OC 473*) rules that even if the lettuce is sweet, it is the preferred *maror*. The Chazon Ish (*OC 124*, p. 39), who personally used ground horseradish (Korman, note 11), ruled that when using lettuce one should use mature heads that have a bitter taste. Rav Menashe Klein¹⁸ disagrees and says that the practice among Jews is not to distinguish between sweet and bitter lettuce, and all types of lettuce are acceptable. Similarly, the *Shulchan Aruch Harav (473:27)*; the *Aruch Hashulchan (473:15)* and Rav Moshe Feinstein (*Kol Dodi 15:19*) all state that lettuce—even if it is sweet—is preferable to horseradish.

Rav Moshe Sternbuch (*Teshuvot Vehanhagot 2*, p. 238) rhetorically asks where it is stated that horseradish must be eaten when “it is so bitter that one will almost throw up.” He suggests that after grinding the horseradish, one should leave it uncovered¹⁹ for several hours so that it loses most of its bitterness and becomes edible. Of course, he cautions that it should not be left uncovered too long so that it totally loses its sharpness.

Another way to assuage the guilt of the lettuce eater is to re-examine the reason behind the commandment to eat *maror*. Nowhere does the Torah directly link *maror* with the bitter experience in Egypt. In fact, if this is the reason for eating *maror*, then the Biblical obligation to eat *maror* should have remained even when we could no longer bring the *korban Pesach*. Instead, the Ohr Hachaim (on Exodus 12:8, also see Ibn Ezra's comments on the verse) suggests that the reason for the obligation to eat *maror* is because it served as a condiment to be eaten along with the roasted sacrificial meat. In his weekly e-mail *parshah* sheet, Rabbi Andrew Schein, of Modiin, has suggested that this rationale is the basis for the fulfillment of *maror* with lettuce, as the lettuce makes the meal complete: matzah, meat and vegetables.

With this approach there is no need for lettuce to be particularly bitter. Furthermore, Rabbi Schein has suggested that Rabban Gamliel's statement linking *maror* with the bitter experience was a rationale for the rabbinic enactment of *maror*, but this "new" reason did not invalidate the use of the Biblically acceptable vegetables (lettuce or endives) even if the Biblical obligation of *maror* was no longer applicable.

In summary, there are sufficient grounds for doubting horseradish's inclusion in the Mishnaic list. Furthermore, even if we were to concede that *tamcha* refers to horseradish, it is still listed after lettuce and endives in the presumed order of preference. Moreover, horseradish is sharp not bitter, and its root—rather than its leaves—are eaten. Despite all this, family customs should not quickly be abandoned, and horseradish has a long-standing place at the Seder. There may even be reasons to prefer horseradish to lettuce (e.g., difficulty of cleaning lettuce of bugs), but given a choice that does not tamper with a family tradition, it would seem that on Seder night horseradish may be the choice condiment to go with gefilte fish but not to fulfill the mitzvah of *maror*.²⁰

Notes

1. For more details on this topic see Dr. Arthur (Ari) Schaffer, "The History of Horseradish as the Bitter Herb of Passover," *Gesher* 8 (1981): 217-237; Yehuda Feliks, "The Identification of Two Categories of Bitter Herb—Hazeret and Tamkhah," (Hebrew), *BDD* 1 (summer 1995): 71-90; Avraham Korman, "Maror: Chasah or Chrain," *HaMa'ayan* (Nisan 5754):43-51; Yosef Shores, "On Eating Chrain on the Seder Night," *HaMa'ayan* (Tammuz 5754) : 64; Josef Lewy, *Minhag Yisrael Torah* 2 (5753), 300-304 and Rabbi Matis Blum, *Torah Lodaas* (New York, 1991), 187-190.
2. On the status of the mitzvah today, see Rava's statement on *Pesachim* 120a; Rambam, *Chametz Umatzah* 7:12; *MB* 473:33. See *SA Harav OC* 475:15 which states that the eating of *maror* today is *zecher lemikdash*.
3. In the Talmud, the order is somewhat different. Also, the last item mentioned—*maror*—refers to a specific vegetable, and is not a generic term.
4. See *SA OC* 473:5 and *Aruch Hashulchan OC* 473:13. This seems to be based on Rashi's understanding of Ravina's question to Rav Acha b'rei deRava as to why he was looking for "*maror*" (the fifth item on the list), when *chazeret* was listed first and was available. Confronted with this question, Rav Acha b'rei deRava stopped looking (*Pesachim* 39a).
5. Endives (*Cichorium endiva*) and chicory (*Cichorium intybus*) are closely related and acceptable for *maror*, but not often used. Belgian endive is the same species as chicory and is used for *maror* by some people.
6. See e.g. *MB* 473:42 and *Sha'ar Hatziyun* 473:46.
7. Aware of the difference, the Talmud uses the word "*mar*" for bitter and "*charif*" for sharp.
8. See Schaffer, note 26, for the origin of the name horseradish.
9. The Nachlat Yaakov, quoted in *Leket Bahir*, says that Rashi is explicitly ruling that one need not only use the five listed, but could use any bitter herb to fulfill the mitzvah.
10. See Zohar Amar and Ari Zivotofsky, "Identification of the Shibuta Fish" (Hebrew), *HaMa'ayan* 45:3 (Nisan 5765): 41-46.
11. The *Magen Avraham* (473:12; cited in *MB* 473:36 and *AH OC* 473:14). In addition, it seems that in some places, when people first began using horseradish, they used the leaves.

12. The Aruch Hashulchan (*OC* 473:13), writing in nineteenth-century Lithuania, says explicitly: “In our country we use horseradish because lettuce is not available before Pesach, except in the courtyards of the princes.”
13. According to the *Shulchan Aruch* (*OC* 475:1), the required amount is a *kezayit* (olive size). For a fascinating debate regarding the minimum amount of *maror* one is required to eat, see *Sha’agot Aryeh* (100); Chatam Sofer (*OC* 140); Avnei Neizer (*OC* 383); Sho’el Umashiv (*Mahadurah Shtiti’a* 10); *Sha’arei Teshuvah* (end of 475) and *Iggerot Moshe* (*OC* 3:66).
14. For discussions regarding boiling or grinding horseradish, see *MB* 473:36 and *Sha’ar Hatziyun* 473:46. See Korman, p. 47; Blum, p. 188 and Lewy, pp. 303-304 for other sources.
15. See Schaffer, note 74.
16. The lettuce referred to is probably more similar to romaine lettuce than the popular iceberg lettuce. Nonetheless it is reported that Rav Aharon Kotler used iceberg lettuce for *maror* (Rabbi Shimon D. Eider, *Halachos of Pesach* 2 [New Jersey, 1985], p. 234, note 23).
17. **According to Targum Onkelos and others, the meaning of Pesach is to have mercy.** See Ari Zivotofsky, “What’s the Truth about ... the Meaning of “Pesach”?”, *Jewish Action* (spring 2004): 58-59.
18. *Mishneh Halachoth* 6, no. 92, pp. 99-100. See also vol. 7, no. 68, pp. 107-110 for his rationale. See also Lewy, pp. 301-302.
19. This would have been anathema to all of my grandparents, as it was for the Gra (see *MB* 473:36). Rav Moshe Feinstein’s ruling is similar to that of Rav Sternbuch (*Kol Dodi* 15:14).
20. All the proofs in the world often do not succeed in changing a long-standing practice. It seems that the Netziv was unable to persuade his son Rav Chaim Berlin (5592-5672), who made *aliyah* from Lithuania and thus had access to leafy vegetables, to use lettuce instead of horseradish. (See his fascinating letter in Korman, note 10.)

Maror—A symbol of Mercy
מאי חזרת! חסא. מאי חסא! דחס רחמנא
עילוון

Our Daf interprets the name of the plant to be used for maror—the chazeres, or chasah—to be associated with the concept of mercy and compassion. This is fascinating, in that the concept of a bitter herb would seem to suggest the hardships and suffering which we endured in Egypt, not the grace and benevolence which Hashem displayed in the redemption process.

It would be more appropriate for the matzah to be called “חסא,” “because that is what we ate upon our departure from Egypt, rather than referring to the bitter herb with this name.

Shem Mi’Shmuel proposes a solution to this irony by first noting that at the seder we eat matzah, the symbol of freedom, before we eat the maror, which represents the bitter suffering we endured as slaves. This must be understood, because once we celebrate our release from slavery, why should we regress and partake of an item which reminds of the previous condition of suffering?

The answer is that after we have achieved a state of freedom and we received the Torah and its mitzvos, we now reflect back on our entire experience, and we can appreciate how even the most difficult times served a purpose in preparing our people to be molded as a nation, united and dedicated to each other and to Hashem.

We eat the matzah first, but we then eat the maror as we consider upon our previous state of suffering. We thank Hashem for this entire process, and we reflect upon Hashem’s compassion which, in retrospect, we realize was present even in our darkest moments.



הרדוף הנחלים על בול משנת 1961 שיצא לכבוד יום העצמאות ה-13, בעיצובו של צבי נרקיס

בהם הוא נזכר גם בשמות, והתלמוד ומופיע לראשונה בתקופת המשנה אינו נזכר בתנ"ך הרדוף השם העברי הם שיבושים של השם, דפלה שמות אלו, כמו גם השם הערבי. ארדפנה, ארדוף, הירדוף, הרדופני: דומים שפירושו "ורד הדפנה", כינוי שדבק בצמח משום שפרחיו דומים, רודופנה הקדום היווני (Rhododaphne) עץ הדפנה). מהחיבור בין ורד ודפנה נגזרים שמותיו בכמה שפות אירופיות, (" ער אציל ועליו לעלי ורד לפרחי הוא שיבוש מהשם הערבי א- Adelfa ועוד. השם הספרדי (Rosenlorbeer) גרמנית, (Laurier rose) צרפתית כגון דפלה.

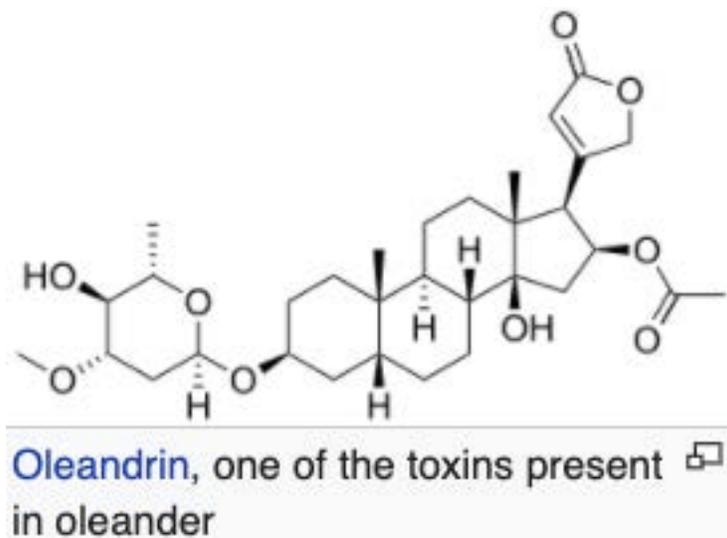
בן סירא כ"ד) כצמח הגדל ביריחו בן סירא יש המשערים כי הוורד (או בתרגומים אחרים "שושנה"), הנזכר בספר ט"ו) ליד הנחל (שם ל"ט י"ז), הוא צמח ההרדוף הגדל בר על גדת הירדן בבקעת יריחו. חוקר ארץ ישראל כי הכוונה לצמח, "Natural History of the Bible" העלה סברה, בספרו הנרי בייקר טריסטראם האנגלי אולם אפשרות זו נפסלה משום שהרודודנדרון כלל אינו צומח בארץ, הרודודנדרון

בישראל הוא מכונה "ורד אל חמאר" (ורד מהדמיון בין ההרדוף לוורד נגזרו כינויים נוספים שלו: בפי הערבים מזהה את הערמון עם ההרדוף לארמית החמור), ובאנגליה הוא נקרא "ורד העמקים". תרגום קדום של המקרא

ביוונית, שפירושו לחות, והוא מעיד על סביבתו הטבעית של ההרדוף במקומות Neros-נגזר מ Nerium השם המדעי (Olea) ורומז על דמיון הצמח ועליו לזית, מקורו בשם הרומי Oleander לחים. שם המין

Nerium oleander /'nɛəriəm 'oʊli:ændər/^[1] most commonly known as oleander or nerium, is a shrub or small tree belonging to subfamily Apocynoideae of the dogbane family Apocynaceae and is cultivated worldwide in temperate and subtropical areas as an ornamental and landscaping plant. It is the only species currently classified in the genus Nerium. It is so widely cultivated that no precise region of origin has been identified, though it is usually associated with the Mediterranean Basin.¹³

Nerium grows to 2–6 m (7–20 ft) tall. It is most commonly grown in its natural shrub form, but can be trained into a small tree with a single trunk. It is tolerant to both drought and inundation, but not to prolonged frost. White, pink or red five-lobed flowers grow in clusters year-round, peaking during the summer. The fruit is a long narrow pair of follicles, which splits open at maturity to release numerous downy seeds.



Several compounds in nerium exhibit toxicity, and it has historically been considered a poisonous plant. However, its bitterness renders it unpalatable to humans and most animals, so poisoning cases are rare and the general risk for human mortality is low. Ingestion of larger amounts may cause nausea, vomiting, excess salivation, abdominal pain, bloody diarrhea and irregular heart rhythm. Prolonged contact with sap may cause skin irritation, eye inflammation and dermatitis.

The origins of the taxonomic name *Nerium oleander*, first assigned by Linnaeus in 1753, are disputed. The genus name *Nerium* is the Latinized form of the Ancient Greek name for the

¹³ wikipedia

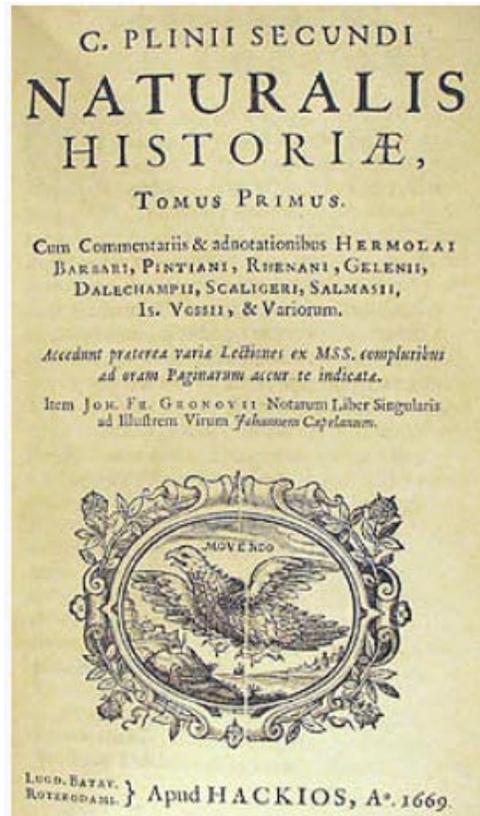
plant *nērion* (νήριον), which is in turn derived from the Greek for water, *nēros* (νηρός), because of the natural habitat of the oleander along rivers and streams.

The word oleander appears as far back as the first century AD, when the Greek physician Pedanius Dioscorides cited it as one of the terms used by the Romans for the plant. Merriam-Webster believes the word is a Medieval Latin corruption of Late Latin names for the plant: *arodandrum* or *lorandrum*, or more plausibly *rhododendron* (another Ancient Greek name for the plant), with the addition of *olea* because of the superficial resemblance to the olive tree (*Olea europea*)

Another theory posited is that oleander is the Latinized form of a Greek compound noun: *ollyo* (ὀλλύω) 'I kill', and the Greek noun for man, *aner*, genitive *andros* (άνήρ, άνδρός). ascribed to oleander's toxicity to humans.

Oleander has historically been considered a poisonous plant because some of its compounds may exhibit toxicity, especially to animals, when consumed in large amounts. Among these compounds are *oleandrin* and *oleandrigenin*, known as cardiac glycosides, which are known to have a narrow therapeutic index and can be toxic when ingested.

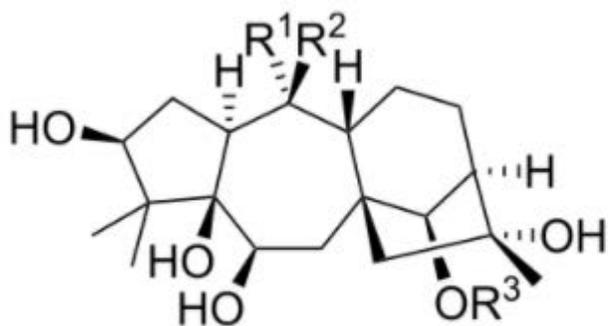
The toxicity of the plant makes it the center of an urban legend documented on several continents and over more than a century. Often told as a true and local event, typically an entire family, or in other tellings a group of scouts, succumb after consuming hot dogs or other food roasted over a campfire using oleander sticks. Some variants tell of this happening to Napoleon's or Alexander the Great's soldiers.



Naturalis Historia, 1669 edition, title page.

There is an ancient account mentioned by **Pliny the Elder** in his *Natural History*, who described a region in Pontus in Turkey where the honey was poisoned from bees having pollinated poisonous flowers, with the honey left as a poisonous trap for an invading army. The flowers have sometimes been mis-translated as Oleander, but Oleander flowers are nectarless and therefore cannot transmit any toxins via nectar. The actual flower referenced by Pliny was *Azalea/Rhododendron*, which is still used in Turkey to produce a hallucinogenic honey.

Mad Honey



Grayanotoxin	R ¹	R ²	R ³
Grayanotoxin I	OH	CH ₃	Ac
Grayanotoxin II		CH ₂	H
Grayanotoxin III	OH	CH ₃	H
Grayanotoxin IV		CH ₂	Ac

Grayanotoxins are a group of closely related neurotoxins named after *Leucothoe grayana*, a plant native to Japan originally named for 19th century American botanist Asa Gray. Grayanotoxin I (grayanotaxane-3,5,6,10,14,16-hexol 14-acetate) is also known

as andromedotoxin, acetylandromedol, rhodotoxin and asebotoxin. Grayanotoxins are produced by *Rhododendron* species and other plants in the family Ericaceae. Honey made from the nectar and so containing pollen of these plants also contains grayanotoxins and is commonly referred to as mad honey. Consumption of the plant or any of its secondary products, including mad honey, can cause a rare poisonous reaction called grayanotoxin poisoning, mad honey disease, honey intoxication, or rhododendron poisoning. It is most frequently produced and consumed in regions of Nepal and Turkey as a recreational drug and traditional medicine.

Mad honey intoxication

Bees that collect pollen and nectar from grayanotoxin-containing plants often produce honey that also contains grayanotoxins. This so-called "mad honey" is the most common cause of grayanotoxin poisoning in humans. Small-scale producers of mad honey typically harvest honey from a small area or single hive in order to produce a final product containing a significant concentration of grayanotoxin. In contrast, large-scale honey production often mixes honey gathered from different locations, diluting the concentration of any contaminated honey.^[8]

Mad honey is deliberately produced in some regions of the world, most notably Nepal and the Black Sea region of Turkey. In Nepal, this type of honey is used by the Gurung people for both its perceived hallucinogenic properties and supposed medicinal benefits. In Turkey, mad honey known as *deli bal* is also used as a recreational drug and traditional medicine.

It is most commonly made from the nectar of *Rhododendron luteum* and *Rhododendron ponticum* in the Caucasus region. In the eighteenth century, this honey was exported to Europe to add to alcoholic drinks to give them extra potency. In modern times, it is consumed locally and exported to North America, Europe and Asia.

Historical use

The intoxicating effects of mad honey have been known for thousands of years. Not surprisingly, there have been many famous episodes of human inebriation caused by its consumption. Xenophon, Aristotle, Strabo, Pliny the Elder and Columella all document the results of eating this "maddening" honey, believed to be from the pollen and nectar of *Rhododendron luteum* and *Rhododendron ponticum*.

According to Xenophon's *Anabasis*, an invading Greek army was accidentally poisoned by harvesting and eating the local Asia Minor honey, but they all made a quick recovery with no fatalities. Having heard of this incident, and realizing that foreign invaders would be ignorant of the dangers of the local honey, King Mithridates later used the honey as a deliberate poison when Pompey's army attacked the Heptakometes in Asia Minor in 69 BC. The Roman soldiers became delirious and nauseated after being tricked into eating the toxic honey, at which point Mithridates's army attacked.