

WEED IDENTIFICATION

Compiled by

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Since 2008 there have been many photos of weeds submitted for identification to the UC Weed Workgroup through ANR Collaborative Tools. Within the Weed Workgroup there are numerous experts who have lent their expertise identifying the plants with a high rate of success!

This document is a compilation of those photographs and conversations to help future identification efforts. The weeds in this document are listed under their Family in alphabetical order by their common name. Often their Genus or scientific name is identified. The document is fully searchable.

While often our experts are able to identify a plant with one fuzzy photograph, the more detail and description provided only helps the process! An additional benefit of adding more details and photos is that it provides an excellent learning opportunity for others who are following the discussion in Collaborative Tools.

Suggestions for adding to the discussion:

- Details which help with an accurate identification:
 - Where is it growing? (ecotype, crop type, moisture, soil type, aspect)
 - Is it growing in a particular location in California? (desert, mountain, water)
 - How big is the plant, and how big are the leaves? (scale)
 - Are there any special attributes of the plant?
 - Why do you need to know what it is?
 - Typically, plants submitted are weeds, however pure curiosity is also accepted!

- Photo Tips: When taking photos, the quality and quantity of photos matters. It is important to take clear photos on a good background that provide details of all plant parts available (flowers, stems, leafs, roots, fruits, old plant skeletons). When possible, it is also important to provide a picture of the habitat. One way to obtain clear images in the field is to face away from the sun, and hold the plant up in the sky. Pictures with a cell phone often come out very clearly and in focus. When plant samples are brought to the office and photographs are taken indoors, using a solid background (paper/posterboard) can help provide a good image.

ALISMATACEAE

Lanceleaf Water Plantain - We usually find *Alisma triviale* (aka *Alisma plantago-aquatica*) in our rice fields. We suspect that this may be a different weed.

Answer: To me, from the pictures, it almost looks like Lanceleaf Water Plantain, *Alisma lanceolatum*. Are the petals light pink? If so, it probably is *Alisma lanceolatum*. However, it also looks like you have a lot of stamens sticking out of the flowers. If the flowers are unisexual and there are more than 7 stamens sticking out of the upper flowers, it could be a native plant called Sanford's arrowhead, *Sagittaria sanfordii*, which has tricky leaves that are not hastate at the base and just look like *Alisma*. It is a rare plant that grows in rice fields in your area. (10/7/2016)



AMARANTHACEAE

Redroot Pigweed - Someone found it in the hay they are feeding their horses. It looks like one of the amaranth species.

Answer: In the photo I see a piece of the inflorescence that looks like a terminal spike, so it could be redroot pigweed. (3/5/2020)



ANACARDIANCEAE

Sugar Bush Sumac - San Benito county weed.

Answer: Looks like a sumac, maybe sugarbush, *Rhus ovata*, but the pic is blurry and I can't figure out scale, so I can't say for sure and the leaf shape doesn't quite look right. Sumacs tend to have larger leaves (2-3 in.) so if they are smaller it's not one of those (*Malosma* or *Rhus*). (12/17/2019)



APIACEAE

Coyote Thistle - A consultant brought this weed into our office today. It came from some rangeland, and the consultant said that they have become worse after a fire. It is very prickly and I would suspect could be especially problematic with livestock. Identification and management advice is welcomed!

Answer: Coyote thistle, *Eryngium* sp., which is a native vernal pool species plant.
(5/20/2019)



APOCYNACEAE

Dogbane - A grower has this plant growing in her irrigated pasture. I'm not sure, a privet possibly but she says that it's growing low to the ground, not shrub-like. She does not think it is privet.

Answer: It is dogbane, *Apocynum cannabinum*, a native plant in the milkweed family with lots of uses and pollinators. (11/7/2018)



Oleander: I got a text from a grower who has had a lot of seeds blow onto his property from an unknown source, and was wondering what they were. The pappus is both above and below the seed. One of the pictures has a ruler for scale, and it is a fairly good-sized seed/pappus.

Answer: (1) I think it may be oleander. I went out to the oleander in my yard and opened one of the pods and it sure looks like the pictures you sent. (2) I talked with the grower and he confirmed it is oleander. There is a row of large mature plants across an adjacent field, and it looks like the seed was blowing in from there. (1/21/2021)



ARISTOLOCHIACEAE

California Pipevine - Might you steer me in a direction for identification of this guy. He's a vine growing on a fence line next to an abandoned vineyard. Although not irrigated, I do believe it has access to deep moisture. He himself (it may not be a he) is a vine, though which one I do not know. Sorry I cannot get better photos as I can't take it out of the ziplock bag. It's crawling with bugs!

Answer: It is Native Pipevine, *Aristolochia californica*, host to the pipevine swallowtail.
(2/6/2019)



ASTERACEAE

Burdock - I got this one sent to me as a photo. All I know is that it is in a landscape setting, probably near the Central Coast and the leaves are big. I'm not familiar with this one either so if anyone can ID, that would be helpful.

Answer: The big leaf plant is burdock, *Arctium lappa*. (10/19/2014)



Canada Thistle (or bull thistle?) in blackberries - Grower complains of this thistle in blackberry (see attached) and can't control it. Seems to be spreading. Round-up only serves to control it temporarily, since after the main plant is killed, a myriad of new ones will emerge around it.

Answer: It looks like *Cirsium* species, likely a Canada thistle. In caneberries, glyphosate and paraquat can provide control of the existing shoots, but the perennial extensive roots system will keep producing new ones from activated buds below ground. The traditional approach is to minimize flow of photosynthates to the root system by not allowing new green shoots to establish, and, eventually depleting the root system. This is accomplished by hoeing, herbicides, mulches or competitive cover crop (especially the ones that benefit from mowing, such as cereals) - the grower might consider what is more feasible: labor on weeding /herbicides/costs of mulch. If the grower has reason to fumigate at the end of blackberry cycle (which I guess is still few years away) for future use it would help a lot, but if the root system is deep and large even flat fumigation will not destroy it completely. Stinger (clopyralid) is very good for thistle control. Stinger has 24c labels on strawberry and cranberry. I am not sure if blackberry has tolerance to stinger, but I suspect that it does. Tim Miller with WSU in Mt Vernon, Washington (twmiller@WSU.edu) may have tried this treatment in black berry. Some ideas to consider. The upper leaf surface appears to have stiff hairs which would make me think that this is *Cirsium vulgare* (bull thistle). Canada thistle leaves are mostly glabrous and often appear shinier green to me. I am getting a lot of similar calls this year with *C. vulgare* coming up through blackberries, but the non-crop kind. Spot treatments with glyphosate works well as does clopyralid or aminopyralid. (6/30/2010)



Fitch's Tarweed – A chemical company rep sent me this photo asking for help in confirming this ID. My best guess is *Centromedia fitchii*.

Answer: Yes, Fitch's Tarweed (*Centromedia fitchii*) is the correct ID. I see this plant on annual rangelands and along roadsides pretty frequently, especially this time of the year when most of the other annuals are dried up. It shows its startling habit – a great green blob in an otherwise dried-out landscape – no wonder it caught the attention of a chemical company rep! (6/21/2021)



Hairy Fleabane - Does anyone know what this weed is in alfalfa from Yolo County?
Hairy fleabane?

Answer: Hairy fleabane would be my guess, too. (12/12/2019)

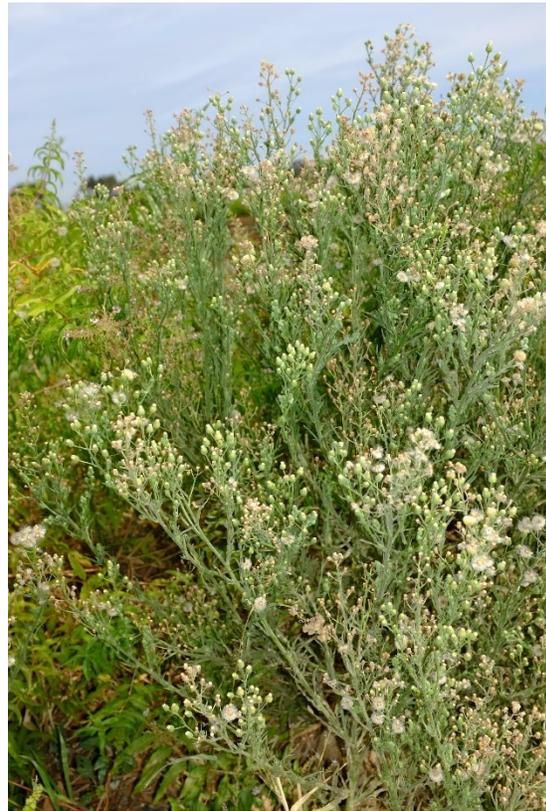


Hairy Fleabane - I found this weed in Yolo County and could use some help with identification.

Answer: Hairy fleabane. Here are some good publications on control strategies:

<https://anrcatalog.ucanr.edu/pdf/8314.pdf>

http://wric.ucdavis.edu/information/natural%20areas/wr_C/Conyza_bonariensis.pdf



Hairy Fleabane – I was asked to identify a weed found on a conventional strawberry farm in Sacramento. I'm thinking it's horseweed.

Answer: It is hairy fleabane (*Conyza bonariensis*). Hairy fleabane leaves appear more greyish than horseweed and can have multiple stems elongating from the rosette, as opposed to a single stem like horseweed. Horseweed gets way taller as well.
(5/27/2021)



Sawtooth Goldenbush - The plant is about 2' tall with many stems. The stem is sparsely hairy and the leaves have hairs but you need a hand lens to see. The stem is somewhat woody at this point but not sure if it is actually a perennial. The stem I have is a bit beat up but when I got it the flowers were all bright yellow but now are turning orange as it dries out. No thorns or spines. Fewer flowers towards the base but there are bunches at the top. Found on drier hillsides in Orange and San Diego Counties. Ideas?

Answer: The yellow-flowered plant looks a lot like sawtooth goldenbush, *Hazardia squarrosa*, a native plant in the daisy family, Asteraceae. It might also be an *Ericameria*, like *Ericameria cuneata*, but *Hazardia* is super-common in southern California. There are photos of it here: http://calphotos.berkeley.edu/cgi-bin/img_query (10/19/2014)



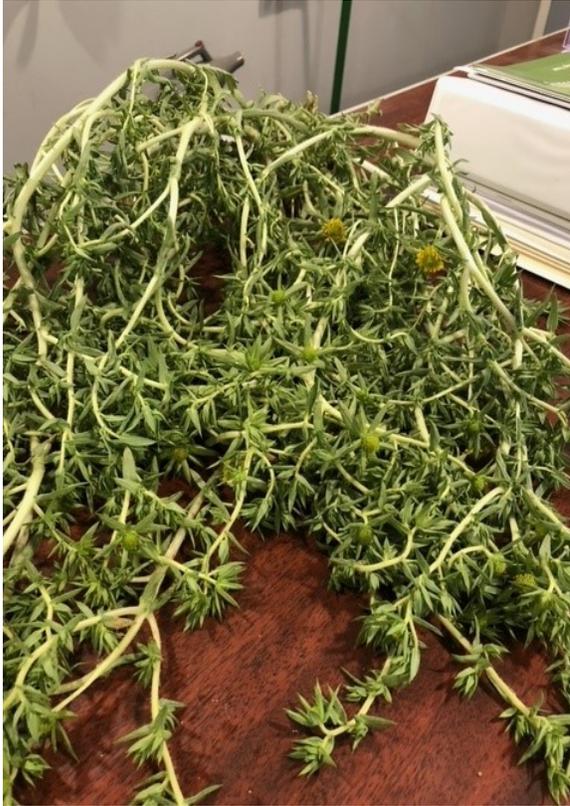
Scale Broom - San Benito county weed.

Answer: Looks like a scale broom, *Lepidospartum squamatum*, perhaps? There appears to be the scale like leaves on the branches and they should have just finished blooming and maturing seeds. (12/17/2019)



Spikeweed – I received this photo of a weed from west of Bakersfield. Does anyone recognize it?

Answer: Do the leaves have sharp tips? If so, looks like spikeweed (*Hemizonia pungens* ssp. *pungens*). It is a California native. (4/19/2021)



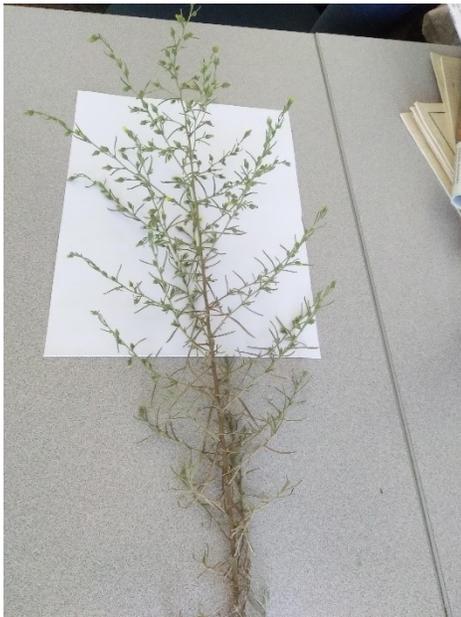
Star Thistle – The rice advisors received this photo yesterday from a rice milling facility. It appears to be a star thistle seedhead, but we wanted to get a second opinion, given that star thistle is not a common rice weed. The mill said they were about one inch in diameter.

Answer: (1) It is probably yellow star thistle, but looks a bit more dainty and might be the closely related tecolote (*Centaurea melitensis*). (2) I wouldn't be surprised if they sucked some up in the combine at the edge of the field or on the equipment pad. Also, who knows if they might have used the combine in a different crop previously and not cleaned the combine as well as they should have prior to harvest. (6/8/2021)



Stinkwort - Discovered this tarweed (at a guess) along a sidewalk bordering undeveloped land, growing in large clusters of up to 3-4 ft. tall. From a distance it blended in with Russian thistle but a closer look and smell suggested that it's tarweed. I was thinking it's a *Holocarpha*, but it doesn't seem to have any resin glands visible on the leaves or bracts. It has hairs on all parts and a smell like camphor (a bit less pleasant than the other tarweeds I've met). Does anyone know which species it might be?

Answer: I'm going to suggest stinkwort, *Dittrichia graveolens*. It can look a lot like Russian thistle on a driveby. (10/14/2019)



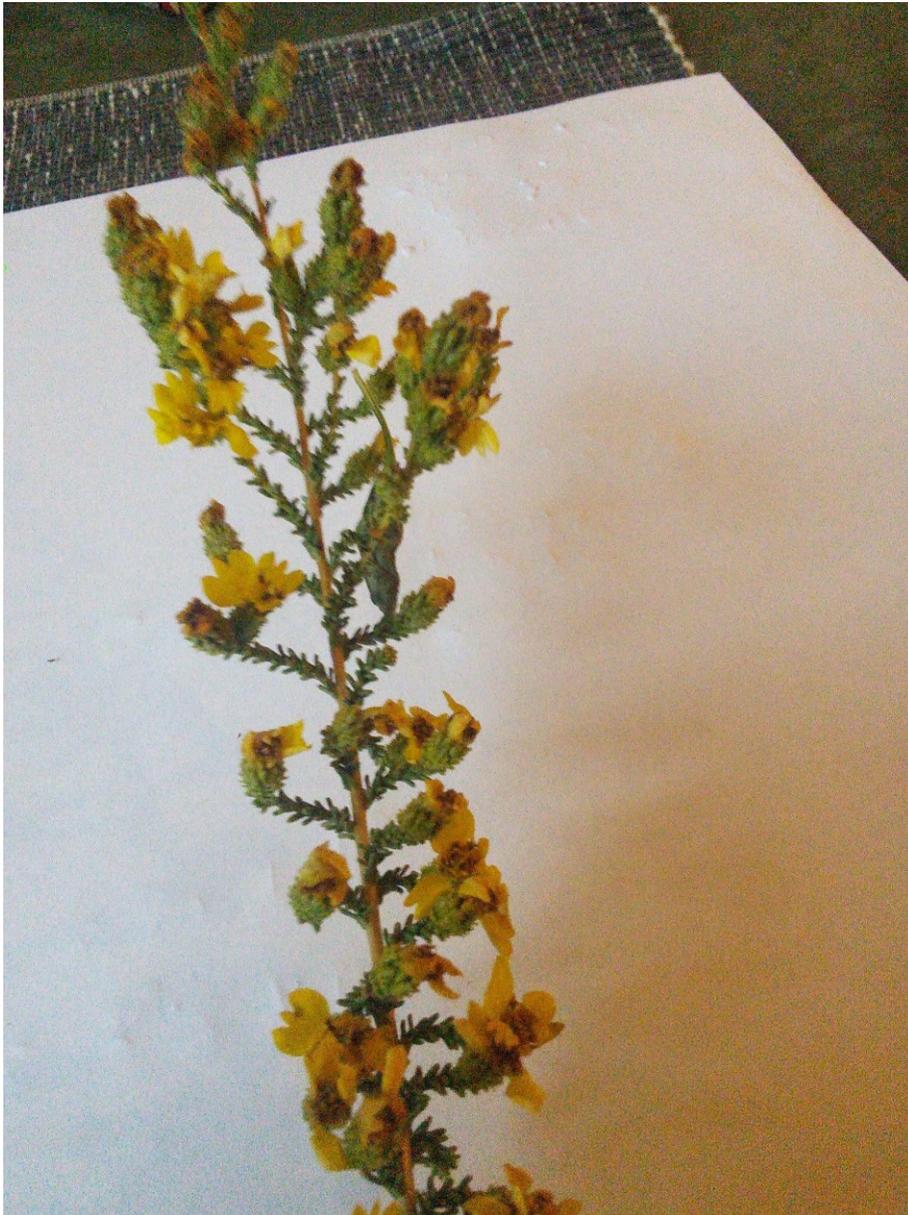
Stinkwort - A grower sent me these photos today and I don't recognize the weed. He said it was giving some of his employees a rash.

Answer: Stinkwort. See the stinkwort weed report from Weed Control in Natural Areas in the Western United States (UC ANR Publication 3547). (9/14/2021)



Virgate Tarweed - A landowner has one acre of pasture with this weed. The picture is blurry, and it only shows the flowers, but I figured I'd send it along and see if anyone can identify it.

Answer: *Holocarpha virgata* (A Gray) Keck. Narrow tarplant, Pitgland tarweed, Yellowflower tarweed. (10/5/2016)



Willowleaf Lettuce - Does anyone know what this weed is? Found in Yolo County, range land area. Reminds me of a type of prickly lettuce, but it's not one I'm familiar with.

Answer: Maybe Willow Leaf Lettuce? *Lactuca saligna*. (8/1/2019)



Willowleaf Lettuce - I have a weed that is along a roadway, never seen on the property before. It's in dry ground, no water source nearby. No flowers seen on it prior to herbicide application. The pictures are taken two days after it was hit with Roundup. These are in Alameda County. It grows wide and low to the ground.

Answer: There is a lot of Willowleaf Lettuce this year where I live near Salinas. I am not quite sure but the growth habit and the leaves make me think of this weed. Looks like the Roundup worked. I agree - it is a *Lactuca*. (7/1/2019)



BORDGINACEAE

Chinese Parsley - Got this photo from a San Diego grower and have not had a chance to see a live sample. His comment was "Roots are fleshy runner type. Roundup fries it but it regrows back in a few weeks later." It looks like an *Atriplex* to me but want to see if any of you concur or have a better idea.

Answer: It looks a bit like *Heliotropium curassavicum* L. Chinese parsley, Heliotrope, Salt heliotrope, Seaside heliotrope. In the borage family. A native in disturbed washes, creeksides, irrigation areas. Has fleshy glabrous leaves and sort of a spreading, but upright habit. Flowers are white in curled over inflorescences. (6/17/2016)



BRASSICACEAE

California Mustard - This is from my tumbleweed research plots in southern San Benito County, south of Pinnacles National Park.

Answer: California Mustard, *Caulanthus lasiophyllus*. (6/20/2019)



Lesser Swine Cress - Any thoughts on what this plant is? From Stanislaus County in a horse pasture.

Answer: Looks like either *Lepidium oblongum* or *Coronopus didymus*. If the fruit is roundish it is Coronopus. If it is flat it is Lepidium. If it smells like skunk and has unflat fruits, then it is *Coronopus didymus* (now *Lepidium didymum* - Lesser swine cress). If it smells like a mustard, and has flat fruits, it could be *Lepidium oblongum*. At any rate, it is a *Lepidium* these days. (4/16/2018)



London Rocket – A person with horses sent me a few photos of pasture plants she wanted me to identify and confirm weren't toxic. I've been able to identify all of the weed photos she sent me except this one (photo attached). Apologies for the poor image quality, that's the best she could send. I'm guessing it's some kind of mustard but would like to be more specific if possible. Any ideas would be great, thanks!

Answer: Yes, that image is definitely of a mustard. Image of maturing fruits would be needed for confident ID, but it looks like a *Sisymbrium*, possibly *Sisymbrium irio* (London rocket), a Eurasian weed, widespread in California. (4/14/2020)



Pennycress - This weed was in hay from Oregon, the vet came in and horses are having loose stools, and we would like to ID this. A suggestion of whitetop (*Cardaria*) has been made, and in one book it says something about cattle having some issues with some glucose xxxxx, something or other, causing some toxic issues. Confounding the issue is the same hay has flixweed in it, and so that might cause issues in the horses?

Answer: The plant is field pennycress, *Thlaspi arvense*, and it does cause toxicity in livestock, including horses. (12/2/2010)



CARYOPHYLLACEAE

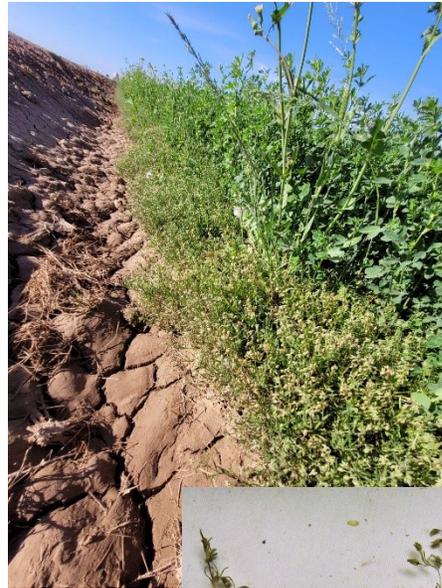
Chickweed - Can anyone help me ID this weed? It has been found in several wheat fields in Colusa County. I know the weeds are small so may be hard to ID but any help would be appreciated.

Answer: Looks like common chickweed to me. I agree, the petioles on the leaves have really long hairs like *Stellaria media*, and the leaf blades developing on the upper leaves look like *Stellaria* too. (12/14/2017)



Dwarf pearlwort – I received an inquiry about a weed sample collected from an alfalfa field in Imperial County. The actual species of interest has narrow leaves.

Answer: I think this species is dwarf pearlwort (*Sagina apetala*) based on the flower, seeds, leaf, and phyllotaxy (whorled). Seems like not a common weed in the low desert, but well established by now. Another species very much alike is corn spurry (*Spergula arvensis*), but their seeds are black in color, whereas it is brown for the dwarf pearlwort. (4/8/2021)



Sand Spurry - I'm having a hard time with the ID on the weed in the attached photos, which is growing in an uncultivated/gravel road area nearby a cultivated area. The grower hasn't seen it before and is concerned that it is expanding/wants to know whether/how to control it.

Answer: I think that plant is *Spergularia rubra*, sand spurry, rather than *Spergula arvensis*, corn spurry. Corn spurry has whorled leaves, and the plant in the photo has opposite leaves and then branches expanding from the leaf axils. Anyhow, they are closely related, and I am sure that control is very much the same. But I don't know much about control. It is very common along gravel roads. (5/5/2014)



CHENOPODIACEAE

Goosefoot - This is a plant found in an orchard last week. It appears to me to be *Chenopodium*, but I am unsure of the exact species. Best guess is *Chenopodium nevadense*, based on the leaf shape.

Answer: Unless the orchard is on the east slope of the Sierras, I don't think it can be *C. nevadensis*. My best guess is *Chenopodium berlandieri*. But not really positive which species. (5/22/2018)



Tumbleweed - Found in Benicia State Recreation Area. Shrub, <18" high, 2 ft. wide. Leaves are small (spine-like, but soft) at nodes all the way along the stem, accompanied by small sharp spines at each node. Tiny (1 – 2mm) yellow flowers - Single flower at each of the nodes towards the outer ends of the branches. Purple streaks along the lower stems fading to green 3-4 inches from the ends. When crushed it has no distinctive scent.

Answer: Looks like you've got Russian thistle ("tumbleweed") to me! *Salsola tragus* L. http://ipm.ucanr.edu/PMG/WEEDS/russian_thistle.html. Really common in natural areas, roadsides, etc. (8/23/2017)



CONVOLVULACEAE

Bindweed - Here is a photo of a weed in a baseball field in Gilroy. The field was just established. The first thing that comes to mind is Field Bindweed (it is growing flat to the ground). However, I am not totally convinced based on what looks like a stipule or something at the base of the petiole of the nice spade shaped leaf in the middle of the photo. I would appreciate more input to make sure I am not missing something.

Answer: I don't think that is a stipule. It looks more like a developing bud. I think your guess of Bindweed is probably right. (5/7/2018)



Japanese Dodder - We had a visit from the ag commissioner's office. A lady has this growing in her yard and she was told that this might be Japanese dodder. Can anyone tell by the photos if this is native or Japanese dodder? It was in her vegetable garden last year. She removed all that she could and she switched to ornamental flowers and it still came back this year. The Ag Commissioner's office needs to find out if they need to remove or if she does.

Answer: It sure could be *Cuscuta japonica*, Japanese dodder. I have seen past invasions in Contra Costa County that I checked per request from Ag Commissioner in 2005-2006. The color of the holoparasitic vines can vary from yellow to bright orange, but diameter of the stems suggest Japanese dodder, even though it was on vegetables (here it has been parasitizing trees and shrubs). The Contra Costa Ag Commissioner's office eradicated it from residential properties. It was thought to be introduced from seed importation from Asian countries where it is believed to have medicinal value. It can spread aggressively in riparian areas and can engulf full grown backyard trees. I saw it on citrus in a San Pablo yard, and in willows behind/near Peets Coffee (along small Cerrito Creek by parking lot behind coffee shop) off San Pablo Avenue in Albany. The vines look like thick pasta (that Tarzan may be able to swing on!). This is a Class A noxious weed. (6/18/2019)



CRASSULACEAE

Pygmyweed - Our up and coming Master Gardener Program has a weed that was sent in that none of us know what it is.

Answer: *Crassula tillaea*, common name is pygmyweed. It seems to be having a good year on gravelly surfaces. (4/22/2019)



CYPERACEAE

Rice Flatsedge - I pulled this sedge from a rice field this season, and I was wondering if anyone could help me with ID.

Answer: If it's an annual, first guess is rice flatsedge, *Cyperus iria*. It's "not found" in California, except that it is. It's common in the Southern rice areas, and suspicion is that it hitched a ride here with non-certified rice seed. If it's a perennial maybe it could simply be yellow nutsedge? I can't see any nutlets in the root ball though. (12/16/2019)



Sedge - I have a sedge from the edge of a rice field that I cannot ID. It does not appear to be on Calflora or the Weeds of the West. I think it is *Cyperus distans*, but any other opinions would be greatly appreciated.

Answer: Your photo does look like photos of *Cyperus distans*. Not sure of the ID. It looks a bit like *Cyperus odoratus*, but your spikelets are narrower. (9/22/2017)



EQUYSTACEAE

Horsetail - I was speaking with a raspberry grower who has a real problem with "jointgrass" in apples that he also grows. He has tried Round-Up plus Rely, but the plants just bend over a bit and come back later on. It has started to spread through the field. What is there to control this weed? Is there a material that can be used in apples?

Answer: It looks like horsetail to me (*Equisetum sp.*). Check this out: I just happened to be reading an ad from OHP about Casoron and noticed that they were were pushing it for horsetail control. I just checked DPR for registration and it is registered for use in raspberry and apples. The weed is *Equisetum sp.* and not jointgrass. The jointgrass I am familiar with is jointed goatgrass and it is a true grass and does not look like your photo. Scouring rush is another common name for *Equisetum*. It is not controlled with Roundup and the symptoms are exactly what your grower described. It is a VERY difficult weed to control. I don't know about Casoron but this is what the PNW Weed Control Handbook and some info on the internet indicates. Casoron applied in three consecutive years at rates of 4, 3, and 2 lb ai/acre suppressed horsetail. For postemergence control, consecutive applications of MCPA have proven effective. Approximately 20 to 30% of horsetail populations are reduced with each application. However, skipping an application will allow plants to regenerate their depleted root system, and control up to this point will have been lost. Horsetail thrives in moist soils. Improved drainage, clean cultivation, and growing crops with dense canopies (very difficult in nursery production) are reported to slowly deplete horsetail populations. The only places I have observed *Equisetum* is at the ends of fields in areas with poor drainage. (7/7/2008)



EUPHORBIACEAE

Creeping Spurge - I volunteered to help a reporter with a story about a weed. Unfortunately, he doesn't know the name, and the picture he sent me is attached. Can anyone help? I am trying to see if he can send me better pictures... In the meantime, I thought maybe someone would recognize it.

Answer: Creeping spurge, *Euphorbia serpens*:

http://ipm.ucanr.edu/PMG/WEEDS/creeping_spurge.html (8/8/2017)



Nodding Spurge - Found this weed in a processing tomato field in Sutter County. Does anyone know what it is? The grower had problems with it last year and isn't sure what it is. The field was organic and is now being managed conventionally.

Answer: Nodding Spurge, *Euphorbia nutans*. (7/2/2018)



Petty Spurge - A person brought this sample to me. It is escaping his Treflan treatments. I would appreciate help with ID'ing it. It is a low growing plant.

Answer: The plant is *Euphorbia peplus*, petty spurge. (12/1/2010)



Turkey Mullein - A walnut grower saw this weed in his field, and he and I don't know what it is. He's actually interested in planting it in his yard, so please do tell me if it is noxious or invasive.

Answer: It looks like Turkey Mullein, *Croton setiger*. It's native, but not desirable if he's got livestock. (7/1/2019)



FABACEAE

Great Bladdery Milkvetch - Does anyone have an idea what this might be? Apparently it is a northern Great Plains species.

Answer: The photo is of *Astragalus megacarpus*, Great Bladdery Milkvetch. (8/16/2011)
Another image can be found here:

http://calphotos.berkeley.edu/cgi/img_query?enlarge=0000+0000+0508+0669

(8/16/2011)



Leather Root - Someone dropped this plant off at our office; it's from the Sacramento Valley area. Any ideas on what it is? Seems like some type of legume. Close up of leaf, clover?

Answer: Looks like *Hoita macrostachya*, a native that is along our creeks and flowering this time of year in our area. Common name leather root. (7/30/2019)



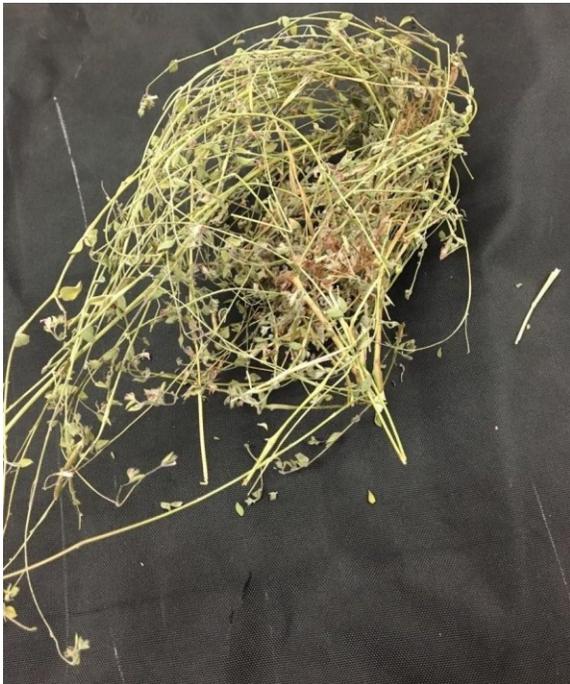
Rose Clover - A consultant brought this weed into our office today. It came from some rangeland, and the consultant said that they have become worse after a fire.

Answer: Rose clover, *Trifolium hirtum*. Rose clover is a non-native, but it has good protein and is desirable for livestock. (5/20/2019)



Spanish Clover - We had this plant sample dropped off at our office in Colusa this morning. It came from the Sutter Buttes. It has small purple flowers and some small pods on it. We were told the roots were about 12 inches and the seeds were small. The gentleman who brought the sample wants to know if it is a legume because he found it on his ranch where he is transitioning from sheep to cattle and was curious about the protein content. Does anyone know what it is?

Answer: Looks like "Spanish clover" a native legume that used to be called *Lotus purshianus* and now has the name *Acmispon americanus*. There is info about the plant distribution at calflora: http://www.calflora.org/cgi-bin/species_query.cgi?where-taxon=Acmispon+americanus+var.+americanus. I am not certain of the protein content, but there must be research out there on the forage value, because it is a very common grassland plant in California. (9/22/2016)



Tomcat Clover - A little help here, grower found this weed in his field - what is it?

Answer: This looks like tomcat clover, *trifolium willdenovii*. This is a native annual. It has the characteristic chevron on the leaves. Here are some pictures:

http://calphotos.berkeley.edu/cgi/img_query?stat=BROWSE&where-genre=Plant&where-taxon=Trifolium+willdenovii&title_tag=Trifolium+willdenovii
(6/15/2015)



HALORAGACEAE

Northern Milfoil - Received from one of the irrigation districts in rice country. Trying to identify.

Answer: Northern milfoil= native, *Myriophyllum sibiricum*, based on number of leaflets.
Note: non-native milfoil generally have 17-22 leaflets on a leaf; Northern has 8 to 15, but there are hybrids, too! (6/30/2017)



HYDROCHARTACEAE

Canadian Pondweed - A Sierra Valley grower inquired what some of the aquatic weeds in his ditch are. He is interested in controlling them to increase his ability to pump mid-season. The ditch is a very slow moving waterway smack dab in the middle of the valley which is used for irrigation. (Sierra Valley is in the Intermountain region of California in Plumas and Sierra counties with a valley floor elevation of about 5,000 feet.) In the past he has used an excavator for control on portions of the ditch. In two instances he used diquat, with good success one year, and poor success the other year. Ultimately he just wants to know what his best options would be for cleaning up his ditches.

Answer: Canadian Pondweed, *Elodea canadensis*. The leaf tips look blunt rather than acute to me. The correct control is dependent on the water use. (6/25/2019)



JUNCACEAE

Common Rush - I received this from a PCA in Yuba County. It is a weed in pasture/forage. I think it is a *Juncus spp.*, but any help narrowing it down further would be great. Sorry for the blurry photos. The plant is about 2-3 feet tall, if that helps.

Answer: That is *Juncus effusus*, a common wetland species found across most of North America. It functions as a pioneer species in wet areas, so is considered invasive when it's not the preferred species. I've seen it look very prominent in pastures because livestock will graze everything around it to the ground, leaving clumps of it standing tall. There was discussion among taxonomists some years ago as to whether there was a more invasive Eurasian strain of this species spreading in the Pacific Northwest, but I don't think an alien invasion theory is necessary to explain the enthusiastic colonizing ability of this highly successful native. (9/1/2020)



LAMIACEAE

Thyme Leaf Mesa Mint - Anyone have any thoughts on what this plant is? This highly aromatic plant is growing in abundance in the Lake Tullock area.

Answer: Looks like a native mint, *Pogogyne serpylloides*. (5/14/2018)



LINACEAE

Flax - *Linum bienne* or *Linum usitatissimum* - I thought some type of flax but I can't verify comfortably with online references. This is in a mowed turf area in Lincoln (NE of Sacramento).

Answer: It is *Linum*, which is flax. I am not sure of the species, but if the petals are 6-10 mm long then it is *Linum bienne*. If they are 10-15 mm long, then it is *Linum usitatissimum*. Both are non-native. (2/18/2020)



LYTHRACEAE

Hyssop Loosestrife - I had a PCA bring in a weed to ID to me and I think we've narrowed it down but was hoping someone could confirm for me. It's in an alfalfa field but the ground is heavy and wet. Has not been in rice. It looked very different in the seedling stage (two pictures included). The mature leaves are a different shape. The stem is square.

Answer: Hyssop Loosestrife, *Lythrum hyssopifolium*. It has been such a wet year that many oddities are coming up in new places. (6/10/2019)



MARTYNIACEAE

Devil's Claw - One of my ranchers sent me these pictures trying to figure out what this plant is they have never seen before. I have never seen it either. It's a low growing weed on rangelands. Very distinct pods that curl up at the end (in the cluster, reminds me of Devil's Claw seed pod). She sent me flower pictures as well as leaf pictures. Any idea what it could be??

Answer: I think you're right - it's Devil's Claw! *Proboscidea*. (8/9/2019)



MYRSINACEAE

Scarlet Pimpernel - A grower has this plant growing in her irrigated pasture. I think it could be scarlet pimpernel?

Answer: Yes, scarlet pimpernel, *Lysimachia arvensis*. (11/7/2018)



ONAGRACEAE

Willowherb - Our up and coming Master Gardener Program has a weed that was sent in that none of us know what it is.

Answer: Willowherb, *Epilobium* spp. I would guess tall willowherb, *Epilobium brachycarpum* or *brachyantherum*. (4/22/2019)



POACEAE

Dallis Grass - What's this dried weed on left, barnyardgrass? From a hay bale sample. Horses don't like it. I believe green one on the right is barnyardgrass.

Answers: (1) It looks like dallis grass on the left and barnyard grass on the right. Must be a hay cutting from an irrigated pasture. (2) Dallis grass from grass hay field; barnyard grass from alfalfa. (3) I agree with dallis grass, but the one on the right could be jungle rice. I don't see awns. (4) The one on right looks more like jungle rice to me too. And, if the alfalfa happens to be Roundup Ready alfalfa, that would also fit since there's quite a bit of glyphosate-resistant junglerice around the Central Valley. (9/2/2020)



Italian ryegrass – I got a call from a grower in Sanger. They drilled an oat and barley mix for hay. It's a rain-fed field. Between the drill rows, there's a grassy weed emerging. I cannot ID it. Can I please have some help from anybody with a keen eye, or do I need to provide some better photos?

Answer: I was able to make a visit and get some closer observations of the grassy weed. The leaf shape in the whorl (rolled), lack of hairs and glossy appearance, long-thin clasping auricles, and a short ligule made it a close ID to Italian ryegrass. There were a couple of plants with emerged heads which really sealed the deal. (1/21/2021)



Italian ryegrass - A client asked about this grassy weed growing in her lawn.

Answers: (1) I believe it is a *lolium spp.* (Italian ryegrass). The key vegetative structures that I could tell by the pictures that led me to the *lolium spp.* Were: Glabrous foliage (smooth; free of hairs), erect round stem, glossy leaves, tight sheath around the stem, well developed auricles, ligule. (2) If underside of leaves are shiny, then it's a dead giveaway from Italian ryegrass. Also, February is an ideal time of year for this grass in California conditions. (3) A wrinkled auricle is very typical of *lolium*. Every time that I collect this weed for my Weed ID class, I have noticed that the auricles are wrinkled and very similar to what I see in your photo. (2/16/2021)



Johnsongrass - I was contacted about this plant in a fresh-market honeydew field. The grower and PCA would like it identified so they know whether or not it will be a future problem. They have not seen it before. Poast herbicide was sprayed twice but this weed kept coming back. It pulls out of the ground extremely easily.

Answer: It looks like Johnsongrass, *Sorghum halepense*. Johnsongrass grows in spreading, leafy tufts with tillers sprouting from the base. Plants are easy to pull from the ground. It is difficult to see the leaf characteristics in the photos but see if these match. Leaves are rolled in the bud, blade is flat, hairless to sparsely hairy, especially near the ligule. Sheathes are open, hairless to sparsely hairy near the collar, and pale green to reddish, ligules are membranous and generally have a fringe of hairs at the top. There are no auricles. <http://ipm.ucanr.edu/PMG/WEEDS/johnsongrass.html> Johnsongrass leaf has a distinct white mid-vein as well. (8/3/2017)



Johnsongrass - This photo was taken of a few weeds that were brought in by a grower who recently took over a walnut orchard that was overgrown with weeds. He has used Roundup on them and found them to be very stubborn in response. Any thoughts on what these are? Based on your identification, any ideas on what the grower can do to begin managing them?

Answer: It looks like it could be Johnsongrass, *Sorghum halepense*. Has grower tried Select Max? That is a rhizome-producing perennial so it can be challenging. Glyphosate has worked ok in my experience. Johnsongrass is a summer-emerging grass that can be coming from either seed or rhizomes. Tillage can be helpful in some situations (maybe not in a well-established walnut orchard due to root injury concerns) to help uproot and dry out the rhizomes. But, the grower will probably want to be fairly aggressive with POST herbicides for a couple years to keep knocking the population back and depleted the stored resources. Glyphosate and/or sethoxdim would be the best bet in orchards. Lastly, Johnsongrass does really well in wet sunny locations (worst problems in young, flood- or furrow-irrigated orchards - depending on your grower's situation, there may be some manipulations of water amount/timing and leveling that could reduce the wet areas that Johnsongrass thrives in. Once the canopy gets large, this is a weed that will become less prevalent (so if he can get larger trees, that would also help....) (4/24/2018)



Lemmon's Needle Grass - An image of a grass found in the Alabama Hills east of the Sierras. Any thoughts?

Answer: It may be *Stipa lemmonii*. It is a native perennial grass that looks a lot like this and is in the area. (5/28/2018)



Orchardgrass? Here are some characteristics/info:

- Clumping to maybe 3' tall or more.
- Found in a landscape in Calaveras County.
- Leaves are >12" long and 1/2" wide.
- Hairs: mostly hairless. Basal leaves have some hairs on underside, other leaves have some hairs along leaf margin.
- membranous ligule 5mm
- no auricles

Answer: First thought is *Dactylis glomerata*, orchardgrass. If leaves are folded in the bud and sheathes fuse below collar it's a possibility. (1/21/2020)

Leaves are rolled in the bud and sheath is fused below collar. Any other thoughts?



Ryegrass - These photos were taken of a few weeds that were brought in by a grower who recently took over a walnut orchard that was overgrown with weeds. He has used Roundup on them and found them to be very stubborn in response. Any thoughts on what these are? Based on your identification, any ideas on what the grower can do to begin managing them?

Answer: Looks like ryegrass I wonder if he might have glyphosate resistant biotype. Has grower tried Select Max for control of the grasses? Probably grower should do everything possible to keep the ryegrass from going to seed. Till everywhere possible and use herbicides besides Roundup to kill weeds that cannot be tilled. I realize that tillage is old fashioned but shallow tillage with harrows and similar devices can do a lot of damage to weeds that don't see this treatment often. Plus tillage works within hours (minutes) and can help prevent seed set. If this is resistant biotype then they certainly do not want any more seed. There are several PRE herbicides that can provide quite good control. Ryegrass is a fall- and winter-germinating grass so the PREs need to get on fairly early. Programs containing oryzalin, pendimethalin, indaziflam, penoxsulam, rimsulfuron, flazasulfuron and a number of others can be pretty effective. Select (clethodim) is registered in non-bearing walnuts, not bearing. Within that chemistry (the ACCase inhibitors), sethoxydim (Poast and others) can be used in bearing walnut. (4/24/2018)



Wheatgrass - Grassy weed in non-crop bioswale. I've pulled some grassy species that apparently has been seeded and seed came from Texas, it grows well but the site manager is concerned about native species being outcompeted and the will be cutting this tall grass before it spreads seed. It is about 1.5 m tall and resembles tall wheatgrass. I'm hoping it is the non-rhizomes producing Elytrigia with short longevity in seedbank and therefore can be managed by preventing flowering for the benefit of native rhizome-propagated grasses. Please, let me know if it looks familiar and you have other management suggestions.

Answer: It is some type of wheatgrass. I do not recognize the particular species, but either an Elytrigia, Agropyron, or Pseudoroegneria. They all used to be in Agropyron and look a lot alike. I would need to see the sample in person to ID it. In order to get it to species, you have to measure the glumes and count nerves on the lemmas, etc. I agree that it is probably what used to be called Elytrigia in the Jepson Manual. (8/24/2010)



POLEMONIACEAE

Skunkweed - Anyone know this prickly thing? It can get to be 8" wide by as tall, can you see the little 5 petal violet flower and then very nasty prickly head develops by fall, has fluffy seeds, and smells herby minty, but has round stems. Inland dry area...gravel road.

Answer: The plant in the picture looks like the *Navarretia* genus, but I'm not sure of the species. A common characteristic of *Navarretia* is a spiny flower, which can be quite annoying when kneeling in the field during the summer months. *Navarretia* is a California native. The plant looks like *Navarretia squarrosa*, skunkweed, which is a native annual that does occur in Humboldt County. (8/2/2010).



POLYGONACEAE

Prostrate Knotweed - I visited an organic dairy today and there was a field that was full of this weed. According to the grower, this year was the first time he had a problem with this. After some years growing triticale, he is growing wheat this year. He said that triticale used to be way more developed by this time of the year, which might have given some growing advantages to this weed.

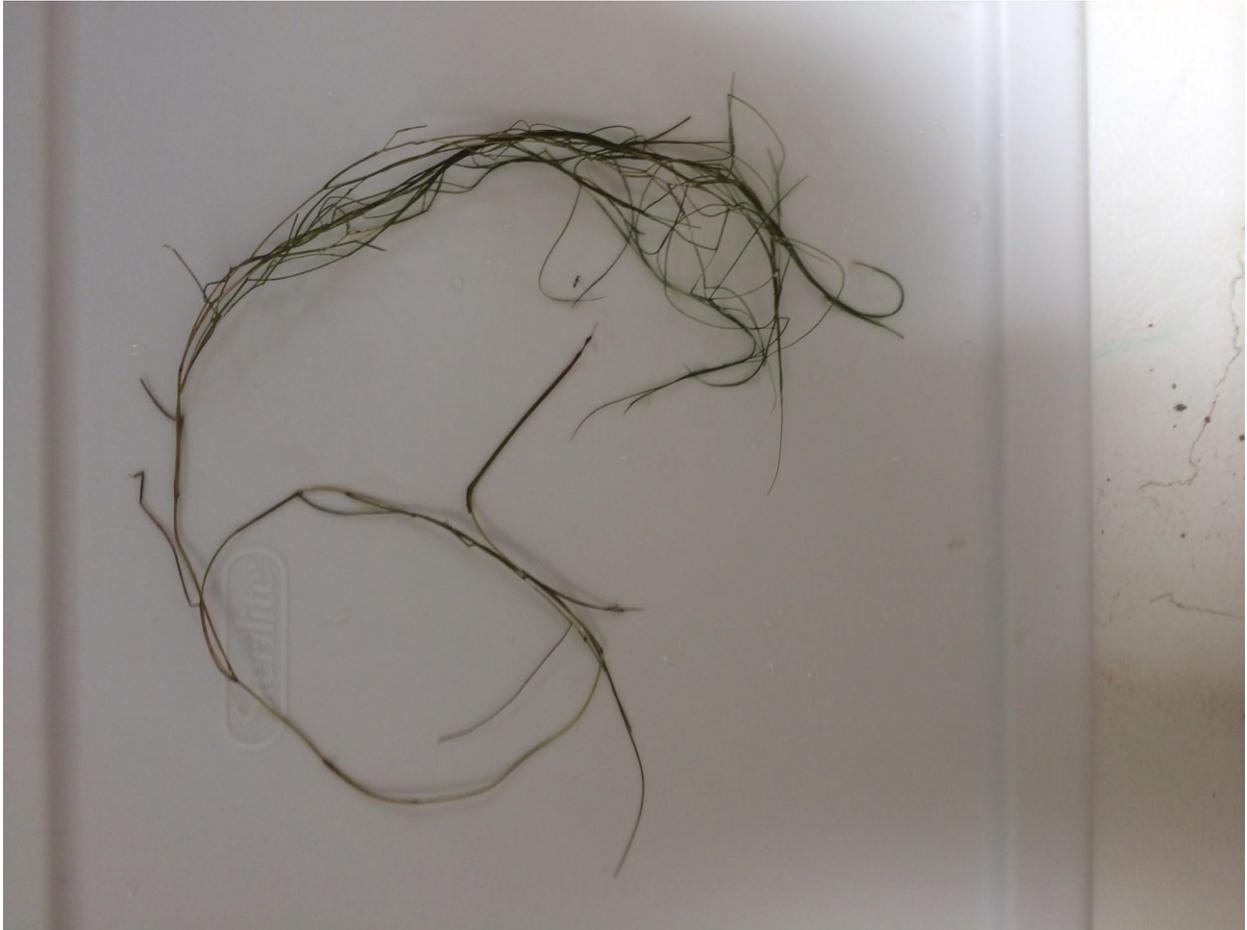
Answer: It seems to be prostrate knotweed, *Polygonum aviculare*. Is there a sheath at the nodes? Yes, there is an ochrea/sheath at the base of the leaves. The wheat developed a canopy more slowly than triticale? From our work in cover crops the pace of canopy development has a huge effect on weed infestations. With all of the rain last winter it was unfortunate they did not plant fast growing triticale. The Europeans also use some blind tillage in cereals (harrows mostly) - something I have not seen here. A harrow might be something for the dairy to look at as it would provide a better option than nothing at all. (5/22/2019)



POTAMOGETONACEAE

Leafy Pondweed - Received from one of the irrigation districts in rice country. Trying to identify.

Answer: Likely Leafy pondweed, *Potamogeton foillos*, native. (6/30/2017)



Leafy Pondweed - A Sierra Valley grower inquired what some of the aquatic weeds in his ditch are. He is interested in controlling them to increase his ability to pump mid-season. The ditch is a very slow moving waterway smack dab in the middle of the valley which is used for irrigation. (Sierra Valley is in the Intermountain Region of California in Plumas and Sierra counties with a valley floor elevation of about 5,000 feet.) In the past, he has used an excavator for control on portions of the ditch. In two instances, he used diquat, with good success one year, and poor success the other year. Ultimately, he just wants to know what his best options would be for cleaning up his ditches.

Answer: Likely it is leafy pondweed, *Potamogeton foliosus*, but I cannot tell if the stem is flattened and what the stipules look like from the photo. What you can use to control it depends on the water use. (6/25/2019)



RANUNCULACEAE

White Watercrowfoot - A Sierra Valley grower inquired what some of the aquatic weeds in his ditch are. He is interested in controlling them to increase his ability to pump mid-season. The ditch is a very slow moving waterway smack dab in the middle of the valley which is used for irrigation. (Sierra Valley is in the Intermountain Region of California in Plumas and Sierra counties with a valley floor elevation of about 5,000 feet.) In the past, he has used an excavator for control on portions of the ditch. In two instances, he used diquat, with good success one year, and poor success the other year. Ultimately, he just wants to know what his best options would be for cleaning up his ditches.

Answer: White watercrowfoot, *Ranunculus aquatilis*. Once more, the answer to control depends on the water use. (6/25/2019)



SCROPHULARIACEAE

Limnophila x Ludoviciana - My colleague found this in a rice field today. The grower is saying it is causing moisture issues when it is pulled through the combine. I don't recognize it, and I was having trouble identifying it. Anyone seen anything similar? It appears to be aquatic, but hard to tell now if the leaves were emerged from the water or completely submerged.

Answer: We have narrowed it down to *Limnophila x Ludoviciana*, which is not a common weed in rice fields, but has been found before in Butte, Glenn, and Yuba county rice fields. We are going to monitor the field next year. (10/21/2019)



SOLANACEAE

Hairy Nightshade - Can anyone help me confirm the identification of this weed seedling?

Answer: It looks like hairy nightshade to me. (5/3/2018)



Nightshade - Found in a damp area along a pump house. There are a few separate plants growing in that area and a few spread out nearby. It has little purple flowers on it when it's in bloom. Landowner is concerned with horses being exposed to it.

Answer: Based on the leaf shape it looks like a nightshade, *Solanum*. My best guess is climbing/bittersweet nightshade or American black nightshade based on the species' ranges and the potential for purple flowers. They can both be toxic to humans and livestock. (7/30/2018)



VERBENACEAE

Frog Fruit - Does anyone know what this weed is? Low growing and creeping, like knotweed, in a fairly xeric environment.

Answer: Your plant is *Phyla nodiflora*, or Frog Fruit or Turkey Tangle. (11/19/2019)



VIOLACEAE

Wild Violet - I need help with plant ID. Cordate leaf shape, velvet leaf like hairs, and very long petiole. It is growing in a dense patch but I couldn't find any creeping roots. The plant is invading a farmer's backyard. He said he sprayed it with a high rate of glyphosate and 2,4-D weeks ago. I didn't believe he sprayed the patch until he showed me the dead grass and thistles intermixed.

Answer: I don't think it's a morningglory or wild ginger. No ginger aroma. Wild Violet, *Viola odorata*, seems to be the best match thus far and from looking at the description it matches everything I saw in the field. (7/30/2019)



UNIDENTIFIED

Mystery Weed - The Master Gardeners in Stanislaus County were given this weed sample that has stumped us as well as a few advisors. Hoping someone can help. It's not the best sample, so we may ask for another one if this one is too difficult to identify. It was found growing in an area that used to be a cornfield, that has been converted to a church garden. They did a soil analysis and found that the water in the area had a slightly higher than normal level of nitrates. (10/30/2019)

