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MEXICAN LAGER



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BY GORDON STRONG

MEXICAN LAGER

As with beers in the United States, Mexican beers used adjuncts for cost purposes. However, in Mexico corn is king, so there is a tradition of corn being used in the grist.

INTERNATIONAL PALE LAGER BY THE NUMBERS

OG:	1.042–1.050
FG:	1.008–1.012
SRM:	2–6
IBU:	18–25
ABV:	4.6–6.0%

When I recently wrote about grisetette being a type of saison, I hadn't expected to write a similar column about lagers but I keep getting questions that spark my interest. This time, the question was about Mexican lager, a style that has gotten a fair amount of interest over the last few years. I first saw it in San Diego at several brewpubs, and thought it was a cool idea to do a craft spin on a classic beach beer. Then I found some canned commercial versions like Ska's Mexican Logger and 21st Amendment's El Sully (both are *muy excelente*). And then it seemed everyone was jumping on the bandwagon and it was a new summer seasonal. At the risk of following a trend, I would like to use this style as a vehicle to talk about three different topics.

The first topic is how brewers can look for creativity in the most unusual places. Rather than chasing the next rainbow IPA, some brewers pick a mundane style and elevate it. Take the humble Mexican lager, sometimes thought of as either "that beer with a lime in it" or "what you order with nachos." Giving it the same attention to detail and careful selection of ingredients can actually give it an upscale twist without losing its soul. I'll talk about this more later.

The second topic is how people treat some styles. I mentioned first seeing this beer in San Diego when there for the National Homebrewers Conference. I was at The Lost Abbey, a brewery I greatly respect, when I saw their Amigo Mexican Lager listed on the Port Brewing board. I was intrigued at what a great craft brewery would do with that style so I ordered it. But then I was berated by a woman who worked there, who apparently thinks very highly of herself as a beer expert, who said, "You're in San Diego, you should

be drinking IPA." (To me, that's as offensive as if I had said to her, "You're a woman, you should be drinking a fruit beer" – which I didn't.)

I explained that I had been drinking nothing but IPAs for the last three days, it was hot, and I was looking to try something different. Not satisfied, Ms. Know-It-All proceeded to lecture me about beer styles. I must have been smirking when she stopped and wanted to know what was so funny. If you know me, you know I would never say, "Do you know who I am?" but that was what I was thinking. However, I just said, "If you're not proud of that beer, then why are you selling it?" That shut her up, but it made me think about the problem with beer snobbery and these more humble styles. Craft is craft, and should be embraced.

The third topic is about how the BJCP Style Guidelines have changed between 2008 and 2015. In 2008, there was a Premium American Lager style that essentially combined the high-end American industrial brands (think Michelob) and the mass-market international styles (think Heineken). But that was an imperfect match and the commercial styles kept drifting further apart. So in 2015, the guidelines separated these styles, combined Premium American Lager with Standard American Lager to create American Lager (BJCP Category 1B), and created a new International Pale Lager (BJCP Category 2A). The major difference is that the International Pale Lagers have more bitterness and can have more flavor. The Mexican lager we are discussing can straddle those two 2015 categories, but I think the craft-type examples are more likely to be at home in the International Pale Lager style, unless they are at the lower end of bitterness, alcohol strength, and flavor. I do want to point out the obvious, which is that

Photo by Charles A. Parker/Images Plus

MEXICAN LAGER

(5 gallons/19 L, all-grain)

OG = 1.049 FG = 1.011

IBU = 19 SRM = 3.5 ABV = 5%

INGREDIENTS

3 lbs. 8 oz. (1.6 kg) German Pilsner malt

2 lbs. (907 g) US 2-row malt

2 lbs. (907 g) German Vienna malt

2 lbs. 12 oz. (1.25 kg) flaked maize

1.5 AAU Tettnanger hops

(first wort hop) (0.33 oz./9 g at 4.5% alpha acids)

3 AAU Tettnanger hops (45 min.)

(0.76 oz./19g at 4.5% alpha acids)

0.5 oz (14 g) Tettnanger hops

(5 min.)

White Labs WLP940 (Mexican Lager)

or Lallemand Diamond

Lager yeast

$\frac{7}{8}$ cup corn sugar (if priming)

STEP BY STEP

On brew day, prepare your ingredients; mill the grains, measure your hops, and prepare your water. This recipe uses reverse osmosis (RO) water. Add $\frac{1}{4}$ tsp 10% phosphoric acid per 5 gallons (19 L) of brewing water, or until water measures pH 5.5 at room temperature. Add 1 tsp. calcium chloride (CaCl₂) salt to the mash.

Mash in the malts and corn at 149 °F (65 °C) in 14 qts. (13 L) of water, and hold this temperature for 60 minutes. Raise the temperature by infusion or direct heating to 168 °F (76 °C) to mashout. Recirculate for 15 minutes. Fly sparge with 168 °F (76 °C) water until 6.5 gallons (24.5 L) of wort is collected.

Boil the wort for 75 minutes, adding the hops at times indicated in the recipe. The first wort hops get added to the kettle after lautering but before a boil is reached. After the boil is complete, chill the wort down to 50 °F (10 °C) and rack to the fermenter.

Oxygenate, then pitch the yeast.

Ferment at 50 °F (10 °C) until complete. At this point it is recommended to remove the beer from the yeast cake by either transferring to a secondary vessel purged of oxygen or gently racking trying to avoid oxidation as best as possible. If your fermenter has a yeast dump valve, you can simply remove the yeast through the bottom valve. Lager for 4 to 8 weeks at 32 °F (0 °C). Rack the beer, prime and bottle condition, or keg and force carbonate.

MEXICAN LAGER

(5 gallons/19 L, extract only)

OG = 1.049 FG = 1.011

IBU = 19 SRM = 3.5 ABV = 5%

INGREDIENTS

4.9 lbs. (2.2 kg) pale liquid malt extract

1.8 lbs. (816 g) Brewers corn syrup

1.5 AAU Tettnanger hops

(first wort hop) (0.33 oz./9 g at 4.5% alpha acids)

3 AAU Tettnanger hops (45 min.)

(0.76 oz./19g at 4.5% alpha acids)

0.5 oz (14 g) Tettnanger hops

(5 min.)

White Labs WLP940 (Mexican Lager)

or Lallemand Diamond

Lager yeast

$\frac{7}{8}$ cup corn sugar (if priming)

STEP BY STEP

Use 6 gallons (23 L) of water in the brew kettle; heat to 158 °F (70 °C). Add the malt extract and corn syrup and stir thoroughly to dissolve completely. You do not want to feel liquid extract at the bottom of the kettle when stirring with your spoon. Turn the heat back on, add the FWH hop addition, and bring to a boil.

Boil the wort for 60 minutes, adding the hops at times indicated in the recipe. Chill to 50 °F (10 °C) and rack to the fermenter.

Follow the remainder of the all-grain recipe for fermentation and packaging instructions.

I'm saying that Mexican lager is a kind of International Pale Lager but not all International Pale Lagers are Mexican lagers. That is, I see Mexican lager as a subset of International Pale Lager. If you are entering it in a competition, it might be helpful to note "craft-type Mexican lager" in the comments so judges will understand your intent.

HISTORY

To understand the Mexican lager style, you have to look to the origin of the Mexican lager brewing. Here it's best to just refer to the Vienna style since Austrian immigrants helped build the Mexican brewing industry, and produce some great amber lagers. Since I'm not talking about Vienna, I won't recount the full story of Anton Dreher, Napoleon III, Maximilian I, Santiago Graf, Negra Modelo, and the fusing of Old World traditions with New World ingredients. It's a similar story to Pilsner-type beers being developed in the United States in the late 1800s, however.

As with beers in the United States, Mexican beers used adjuncts for cost purposes. However, in Mexico corn is king, so there is a tradition of corn being used in the grist. Barley is widely grown, but in modern times (post-NAFTA, anyway), most of the barley for Mexico's brewing industry comes from the United States and Canada.

The modern (pale) Mexican lager follows in the general industrialization story of brewing, with beers becoming lighter and less flavorful as they appealed to a broader market. The modern Mexican lagers have their roots in the 1920s, and have a similar global story of expansion and eventual control by international brewing conglomerates who heavily market the beers and dominate retail distribution. Mexico didn't have a prohibition period, so the consolidation of their brewing industry took place earlier than in the United States. Currently, two conglomerates dominate the Mexican brewing industry.

As with many countries throughout the world, there is a surging craft beer movement in Mexico. However, the Mexican lager described here is more of a United States craft take on the classic Mexican lager, perhaps looking

back towards its European roots.

SENSORY PROFILE

The BJCP style profile for International Pale Lager is quite broad, but it is encompassing the premium mass-market lagers from most countries. The craft interpretation of Mexican lager fits nicely within that description but can be viewed more narrowly since it will almost always feature corn in the grist, and tends to use a neutral yeast.

International Pale Lagers are pale in color (straw to gold), tend to be highly carbonated, and are normally quite clear. The head is typically white in color, but may not have great retention. The Mexican lagers are often deeper in color, more in the gold range. The aroma of an International Pale Lager has a lightly malty impression (low to medium-low) with a grainy or neutral malty quality. The Mexican lager adds a corny sweetness as well (which may be in some of the International Pale Lagers, but usually at a lower level). International Pale Lagers often have a light hop aroma, typically featuring noble-type hops that have a floral or spicy character. This is also the case with Mexican lager – its European roots call for quality European aroma hops. International Pale Lagers can have a varied yeast profile, often with light fermentation byproducts, but Mexican lagers are fairly clean.

International Pale Lagers are crisp, dry, and well-attenuated. The malt flavor matches the aroma, and can be neutral, grainy, lightly malty-sweet, or crackery. Mexican lagers have a similar profile, but bring in a corny sweetness and flavor. I mentioned sweet and dry so some explanation is necessary – the beers have the impression of sweetness on the palate but finish dry. Bitterness is medium-low to medium with the balance generally being malty to even between malt and bitterness, although some European examples are lightly bitter in the balance. Mexican lagers tend to be even to lightly malty. Hop flavors are low to moderate with spicy, floral, or herbal notes.

The fermentation flavors can vary in an International Pale Lager, with a neutral fermentation profile being most common, to expressing some

fermentation by-products such as a light apple fruitiness. Mexican lagers are clean, though. As lagers, all these beers should be smooth on the palate. The dryness and higher carbonation levels can give it a bite in the finish, but Mexican lagers tend to have a restrained bite. The aftertaste is typically clean, with a little malt flavor and sometimes a light hop flavor.

While the alcohol level in an International Pale Lager can go as high as 6% ABV, most are in the 5% range. I think the Mexican lager works best in the 4.5% to 5.5% range; I often make it towards the lower end of the range when I expect to be drinking it in the middle of the summer.

BREWING INGREDIENTS AND METHODS

The grist for a Mexican lager is mostly lightly-kilned base malts with somewhere between 10 and 40% corn. The base malts can be a mix of 2-row, 6-row, Pilsner malt, and Vienna malt. The quality of the malt will have a large impact on flavor, so continental malts are often found in the 'upgrade' versions. I personally prefer German malts in this type of beer, but if I was using a low percentage of corn I might use some more neutral North American 2-row. I wouldn't use 6-row unless I was using a very high percentage of corn and was worried about fully converting the starches.

The percentage of corn will also have an impact on flavor and quality. The higher the percentage, the more dominant the corn flavor will become, and the less forward the malt character. Corn can come in many forms, but flaked maize is often the most convenient for brewers since it can be mashed along with the barley malt. If using flaked maize, freshness is very important since old maize often has an oxidized fatty flavor that is unappealing. I personally prefer to go somewhere in the middle, around 20-25% of the grist.

For extract brewers, choices are more difficult since flaked maize must be mashed. I suppose if you want the flavor of the corn but don't care about clarity, you can steep the maize before adding the malt extract but this will

give you a starch haze (you'll need to increase the pale malt extract to compensate for the loss of fermentables from the corn). <Insert your favorite joke about New England Mexican lager here>. You can sometimes find Brewers Corn Syrup, which is different than the Karo brand (or similar) Corn Syrups in grocery stores (avoid those; they have high-fructose corn syrup and additional flavorings like vanilla). A pale malt extract made from Pilsner-type malts would be appropriate for the rest of the fermentables.

Mashing for attenuation is the name of the game. If you are using a single infusion mash, go for something in the 149–151 °F (65–66 °C) range. A German-style step mash would also work; I tend to use rests at 131 °F/35 °C, 145 °F/63 °C, and 158 °F/70 °C for a beer like this. I don't think a decoction mash is necessary because you are not looking for extra flavor development and color from this process.

German or Czech hops that are associated with European lagers would be most appropriate for this style, but it shouldn't have a heavy hopping. I like to have a noticeable hop aroma and flavor, and between 18 and 25 IBUs. Hop varieties like Tettnanger, Hallertauer, and Saaz would be appropriate, as would US-grown alternatives like Sterling, Santiam, Vanguard, Liberty, or Crystal. I would pick the freshest hops from that list regardless of the country of origin. Dry hopping isn't expected in a style like this, but if you use it, use a light hand (a half ounce of hops or less).

There is a special yeast that can be used in this style, White Labs WLP940 Mexican Lager yeast. It really does suit this style well and has an unmistakable flavor that I associate with the style. However, this yeast isn't widely available so you may have to substitute a neutral lager strain. Avoid yeast that throw a lot of sulfur, have apple-like byproducts, or that otherwise aren't clean. Ferment cool and lager sufficiently to allow the beer to smooth out and to reduce any green flavors (i.e., a traditional lager fermentation and conditioning process).

The water profile should be relatively neutral for this style, as the fin-

ished beer shouldn't have a mineral flavor. I avoid calcium sulfate (gypsum) since it often clashes with noble hops, and I don't like to add sulfury notes to a lager. Using calcium chloride will play up the malt in the balance and give it a softer, wetter finish.

HOME BREW EXAMPLE

I'm going mid-range with the corn, keeping it at about 25% of the grist, while using a blend of Pilsner, US 2-row, and Vienna for the remainder. I'm using Vienna for tradition, to help maintain the ties to the original Mexican lagers, but also to give it a little more color. Pilsner malt carries the largest percentage of the grist, with the US 2-row being used to dilute the flavor a bit. Yes, I'm afraid of using all German malts and making it too malty, and I do want some of that corn character to come through.

I'm shooting for a 5% beer with around 20 IBUs, which should make it an easy-drinking lawnmower type beer. The hops are all Tettnanger, which I like for its spicy quality. Hallertauer or other noble-type hops would work as well. If you were trying to be excessively cute (which I'm not...), you could look for hop varieties that have a light lime zest character. I'm using first-wort hopping for flavor, and a light finishing hop addition for aroma. Balance the bittering addition to hit around 20 IBUs, and you're good to go.

I'll mash at 149 °F (65 °C) for attenuation without being excessively dry. I want the beer to retain some body, but I don't want to add crystal malts, other flaked grains, Carapils®, or the like. I'll use a light water salt treatment keeping with calcium chloride to give it a softer finish. I don't like adding gypsum in most lagers since it can accentuate the sulfur flavor and aroma.

I consider the yeast (along with the corn) as being the key components in this recipe. My choice is White Labs WLP940 (Mexican Lager), which has a unique flavor that I associate with commercial beers there. I wish I had a better descriptor, but once you taste it, you will recognize it. Normal fermentation regime for me, 50 °F (10 °C) for primary fermentation and lager at near freezing (32 °F/0 °C). If you can't get

this yeast, try a clean German yeast like Wyeast 2124 (Bohemian Lager), WLP830 (German Lager), Lallemund Diamond Lager, or Fermentis Saflager W-34/70 dry lager yeast.

If you enter this in a competition, try the BJCP 2A International Pale Lager category but specify that you are making a craft Mexican lager. 