MEDIA RECIPES

Vaillancourt Laboratory

Fries Complete Media

Sucrose	30 g
NH^-_4 Tartrate (Ammonium Tartrate)	5 g
NH_4NO_3 (Ammonium Nitrate)	1 g
KH_2PO_4 (Potassium Phosphate)	1 g
$MgSO_4.7H_2O$ anhydrous (Magnesium Sulfate)	0.48 g
NaCl (Sodium Chloride)	1 g
$CaCl_2.2H_2O$ (Calcium Chloride)	0.13 g or 884 µl of 1 M solution
Yeast Extract	1 g

Add 1.5% agar for plates.

Adjust the volume to 1 Liter with nonopure H_2O and autoclave.

Fries Minimal Media (no Yeast Extract)

Sucrose	30 g
NH^-_4 Tartrate (Ammonium Tartrate)	5 g
NH_4NO_3 (Ammonium Nitrate)	1 g
KH_2PO_4 (Potassium Phosphate)	1 g
$MgSO_4.7H_2O$ anhydrous (Magnesium Sulfate)	0.48 g
NaCl (Sodium Chloride)	1 g
$CaCl_2.2H_2O$ (Calcium Chloride)	0.13 g or 884 µl of 1 M solution

Adjust the volume to 1 Liter with nonopure H_2O and autoclave.

Fries Glycine or Fries Histidine (no Yeast Extract)

Glycine [10 mM]	0.75 g
Or Histidine [10 mM]	2.096 g
NH^-_4 Tartrate (Ammonium Tartrate)	5 g
NH_4NO_3 (Ammonium Nitrate)	1 g
KH_2PO_4 (Potassium Phosphate)	1 g
NaCl (Sodium Chloride)	1 g
$MgSO_4.7H_2O$ anhydrous (Magnesium Sulfate)	0.48 g
$CaCl_2.2H_2O$ (Calcium Chloride)	884 µl of 1 M solution

Adjust the volume to 1 Liter with nanopure H_2O and autoclave.

Fries NO_3^-

Sucrose	30 g
KNO3	5 g
KH_2PO_4 (Potassium Phosphate)	1 g
$MgSO_4.7H_2O$ anhydrous (Magnesium Sulfate)	0.48 g
NaCl (Sodium Chloride)	1 g
$CaCl_2.2H_2O$ (Calcium Chloride)	884 ul of 1 M solution
Agar (for plates)	15 g

Complete the volume to 1 Liter with H_2O and autoclave.

Fries Pectin

Pectin *	5 g
Na Pectinate (Polygalacturonic Acid Sodium Salt)	5 g
NH^-_4 Tartrate (Ammonium Tartrate)	5 g
NH_4NO_3 (Ammonium Nitrate)	1 g
KH_2PO_4 (Potassium Phosphate)	1 g
$MgSO_4.7H_2O$ anhydrous (Magnesium Sulfate)	0.48 g
NaCl (Sodium Chloride)	1 g
$CaCl_2.2H_2O$ (Calcium Chloride)	884 ul of 1 M liquid stock

* Sprinkle the pectin over a small amount of water, allow to soften, then add to solution
Complete the volume to 1 Liter and autoclave it. Add agar 1,5% if needed.

Mark Farman's Oatmeal Agar (for *Magnaporthe* or *Colletotrichum*)

For 1 liter mix:
25 g Old Fashion Oats
500 ml Water
Cook on a hotplate stirring at a temperature of 50-60^{o}C for ½-¾ hours (do not boil)
Strain through cheesecloth.
Dilute to 1000 ml.
Add 1.5% agar.

Clarified V-8 Juice Agar

Mix 300 ml V-8 juice with 4.5 g $CaCO_3$
Centrifuge 3000 rpm/10'
Dilute 200 ml clarified V-8 juice to 1 Liter
Add 1.5% Agar (15 g), Autoclave

Mung Bean Broth (for *G. zeae*)

Bring 1 liter dH_2O to a boil
Remove from heat, allow to sit 30 seconds
Add 40 g of dried Mung Beans, allow to steep 10 minutes
Filter through cheesecloth via gravity
Throw away the beans in the cheesecloth
Divide the broth as needed.
Autoclave for 30 minutes.
Allow broth to cool overnight before inoculating.

Mung Bean Agar (for *G. zeae*)

Bring 1 Liter of dH_2O to a boil in a 2 liter beaker.
Add 40 g of dried Mung Beans and bring back to a boil for 23 minutes or until the beans crack open
Filter through cheesecloth via gravity
Discard the beans
Adjust the filtrate volume to 1 Liter with dH_2O
Add 20 g Bacto Agar/liter of media.
Autoclave for 30 minutes.

CMC medium (for production of conidia by *G. zeae*)

15g carboxymethylcellulose
1.0 g NH_4NO_3
1.0g KH_2PO_4
0.5g $MgSO_4$ x $7H_2O$
1.0 g yeast extract
Dissolve* in 1L and autoclave.
*first slowly dissolve the CMC in a small amount (50-100mL) of water, and then gradually add the rest of the water while heating to completely dissolve.

Carrot Agar (for *Gibberella zeae* crosses)

400 g of fresh washed, peeled, diced carrots
Autoclave it in 400 ml of H_2O for 20 minutes
Blend the carrots and add additional 500 ml H_2O (use some to rinse the blender)
Add 20 g agar
Autoclave for 30 minutes.
Pour thick plates

Green Bean Pod Agar for *C. lindemuthianum*

Open a ~1 lb can of cut green beans (DO NOT USE FRENCH CUT)
Place entire contents into a blender
Blend until homogenous
Dilute to 1L volume with Nan-O-Pure water
Add 2% Bacto Agar (20g/L)
Autoclave slow exhaust

Green Bean Juice Agar for *C. lindemuthianum*

Open a ~1 lb can of cut green beans (DO NOT USE FRENCH CUT)
Drain the liquid into a 1L graduate cylinder. Throw the beans into the trash.
Dilute the liquid to 1L volume with Nan-O-Pure water
Add 2% Bacto Agar (20g/L
Autoclave slow exhaust

M3 Solid (from Junqueira et al 1984) for *C. lindemuthianum*

Ingredient	Amount
Sucrose	10 g
Agar	20 g
KH_2PO_4	2 g
$MgSO_47H_2O$	1 g
Peptone	6 g

Adjust volume to 1 liter and autoclave.
Add 1 ml of Vitamin Solution after cooled down.

M3 S Liquid

Ingredient	Amount
$MgSO_47H_2O$	2.5 g
KH_2PO_4	2.7 g
Yeast extract	1.0 g
Bacto peptone	1.9 g
Sucrose	10 g

Adjust volume to 1 liter and autoclave.

YPD (YEPD) media for yeast

Yeast Extract	10 g
Peptone	20 g
Dextrose (D-glucose)	20 g

Adjust the volume to 1 Liter and autoclave it. Add Agar 1.5% if desired.

Terrific Broth (for Bacteria)

To 900 mls of water add:	
Triptone	12 g
Yeast Extract	24 g
Glycerol	4 ml
In 100 mls mix:	
KH_2PO_4	2.31 g
K_2HPO_4	12.54 g

Autoclave separately and mix.