"M" or minimal media
(low ionic strength medium to decrease palmelloids and encourage flagella growth)

Solution #	For 1 Liter
1. 10X Trace metal stock	1.0 ml
2. 10% Na Citrate•$2H_20$	5.0 ml
3. 1% $FeCl_3$•$6H_2O$	1.0 ml
4. 5.3% $CaCl_2$•$2H_2O$	1.0 ml
5. 10% $MgSO_4$•$7H_2O$	3.0 ml
6. 10% NH_4NO_3	3.0 ml
7. 10% KH_2PO_4	0.7 ml
8. 10% K_2HPO_4•$3H_2O$	1.5 ml (start with 1.2 ml, use to pH)

Add components to distilled water in the order given
pH 6.8

10X Trace Metal Stock Solution

Component	mg/L in 10X stock
1. H_3BO_3	1000
2. $ZnSO_4$•$7H_2O$	1000
3. $MnSO_4$•H_2O	303
4. $CoCl_2$•$6H_2O$	200
5. Na_2MoO_4•$2H_2O$	200
6. $CuSO_4$•$5H_2O$	70

"M-N" medium (for gametogenesis)
Same as M but omit solutions 6 and 7 and double the amount of 8. In some cases, better mating is observed when gametes are prepared in M-N + 10mM HEPES, pH 7.0.

"N" medium (nitrate as nitrogen source)
Omit solution 6 and add 4 ml 1M KNO_3

"R" medium (acetate as carbon source)
Same as M but add 10 ml of 2.2M NaAc/Liter after all of the components are added. Also, increase solution 7 and 8 by 3X.

"½ R" medium (sometimes used for mating plates to improve survival of tetrad progeny)
Same as M but add 5 ml of 2.2M NaAc/Liter after all of the components are added. Also, increase solutions 7 and 8 by 3X.

Arginine medium (used for arginine auxotrophs)
Same as M but add 0.5 ml of 10% of L-arginine/Liter of media before autoclaving.

Arginine medium for mating plates (to increase survival of arg^- progeny)
Same as M but add 2 ml of 10% of L-arginine/Liter of media and reduce solution 6 to 0.3 ml/L.

SGII medium (used for transformation with glass beads)
Use solutions 1 - 6 as for M medium, then add:
2 g/L $NaOAc \cdot 3H_2O$
3.67 g/L $NaH_2PO_4 \cdot H_2O$
1.5 g/L K_2HPO_4
pH 6.2

SGII/NO_3 medium (used for selection of NIT+ transformants)
Make SGII as above, but omit solution 6 and add 4 ml 1M KNO_3.