

## Appendix A Medium description.

Name	Preparation method
Modified solid Aleksandrov medium	5 g sucrose, 0.5 g magnesium sulfate heptahydrate ( $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$ ), 0.1 g disodium hydrogen phosphate ( $\text{Na}_2\text{HPO}_4$ ), 0.1 g calcium carbonate ( $\text{CaCO}_3$ ), 0.005 g ferric chloride ( $\text{FeCl}_3$ ), 15 g agar powder, 1 g K-feldspar powder ( $\text{KAlSi}_3\text{O}_8$ ) and 1 L sterilized water, pH 7.0-7.5.
Seed fluid medium	10 g sucrose, 0.5 g magnesium sulfate heptahydrate ( $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$ ), 1 g calcium carbonate ( $\text{CaCO}_3$ ), 1 g ammonium sulfate ( $(\text{NH}_4)_2\text{SO}_4$ ), 0.1 g sodium chloride ( $\text{NaCl}$ ), 0.5 g yeast extraction, 2.0 g dipotassium hydrogen phosphate ( $\text{K}_2\text{HPO}_4$ ) and 1 L sterilized water, pH 7.4.
Re-screening medium	10 g sucrose, 0.5 g magnesium sulfate heptahydrate ( $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$ ), 1 g calcium carbonate ( $\text{CaCO}_3$ ), 1 g ammonium sulfate ( $(\text{NH}_4)_2\text{SO}_4$ ), 0.1 g sodium chloride ( $\text{NaCl}$ ), 0.5 g yeast extraction, 2.0 g disodium hydrogen phosphate ( $\text{Na}_2\text{HPO}_4$ ), 10 g K-feldspar powder ( $\text{KAlSi}_3\text{O}_8$ ) and 1 L sterilized water, pH 7.4.

Appendix B



## Appendix C Plant hormones and organic acids produced by the strain JGK.

Production	Component	Peak area	Content (mg mL <sup>-1</sup> )
Plant hormones	ZT (zeatin)	802697.4	0.005887
	GA (gibberellin)	406157.5	0.086188
	KT (kinetin)	437131.1	0.008509
	IAA (auxin)	281244	0.009161
Organic acids	oxalic acid	1571030	0.265114
	tartaric acid	54588.99	0.054138
	malic acid	110789.5	0.221624
	lactic acid	107367.2	0.242019
	acetic acid	73095.54	0.363694
	citric acid	73615.17	0.145007
	succinic acid	170109	0.314162