



Instructions
For
Water Soluble
IBA-K
Indole Butyric Acid
&
NAA
Napthelene Acetic Acid

Water Soluble IBA-K Instructions
Indole Butyric Acid

For best results mix NAA (Naphthelene Acetic Acid) with IBA-K using 50% NAA to IBA-k.

For example 200ppm IBA-k mixed with 100ppm NAA.

NAA is best used at lower concentrations. (200ppm IBA-k : 100ppm NAA) and (300ppm IBA-k : 100ppm NAA) work extremely well.

Store powders in an airtight container in a cool dark place.

IBA-k is sensitive to light and air and will degrade if exposed for too long.

Spray and Drip Down Method.

First plant the cuttings in chosen medium. Spray the solution of rooting hormone evenly over the cuttings until it drips down into the rooting medium.

For soft herbaceous cuttings of Begonia, Fuchsia etc. use 50-250ppm/IBA-k. For cutting that take a long time to root or suffer from root fungus, spray solution periodically on leaves and stems until it drips down into medium.

Total Immersion Method.

First totally immerse the cuttings in chosen solution for a few seconds. The solution should be at room temperature. Then plant the cutting into pre-watered rooting medium.

If the solution is cold, the stomata will close and uptake of the hormones will be reduced.

A small basket can be used to immerse the cuttings for a few seconds before lifting out and planting. Do not place too many cutting into solution at the same time. Once planted allow the solution to dry on the cuttings before watering, misting or covering.

This method is especially good for broadleaf species.

For soft herbaceous cuttings of Chrysanthemum, Ficus Clematis etc. use 50-250ppm/IBA-k.

Softwood cuttings of broadleaf trees and shrubs use 50-300ppm/IBA-k.

Hardwood cuttings of broadleaf species and conifers etc use 200-500ppm/IBA-k.

Basal Long Soak Method.

Use this long soak method for species that are more difficult to root, more woody or sensitive to the higher concentrations in other methods.

A long soak of the cutting in the solution causes the plant tissues to absorb the hormones active ingredients. The solution should be at room temperature. Then plant the cutting into pre-watered rooting medium.

If the solution is cold, the stomata will close and uptake of the hormones will be reduced.

Immerse the ends of the cuttings into the solution by about 2-3cm for 12-24 hours then plant into pre-watered growing medium.

This method is especially good for broadleaf species.

Difficult to root herbaceous species use 150-300ppm/IBA-k.

Hardwood cuttings of broadleaf species and conifers etc use 800-1500ppm/IBA-k.

Quick Dip Method.

First prepare the cuttings then immerse about 20-25mm of the cuttings in chosen solution for a few seconds. The solution should be at room temperature. Then plant the cutting into pre-watered rooting medium.

Try to use the lowest possible concentrations to achieve the desired results. Concentrations that are too high may result in lower numbers of roots formed, Phytotoxicity, Shock, Excessive callous and uneven rooting.

This method is especially good for broadleaf species.

Herbaceous species of tropical and houseplants use 150-500ppm/IBA-k.

Softwood cuttings use 500-1000ppm/IBA-k.

Hardwood cuttings of broadleaf species and conifers etc use 500-2000ppm/IBA-k.

Difficult to root varieties 5000-20000ppmIBA-k.

IBA-k		150ppm	200ppm	250ppm	300ppm	400ppm	500ppm
SCOOPS	GRAMS	LITRES	LITRES	LITRES	LITRES	LITRES	LITRES
1	0.08	0.45	0.34	0.27	0.22	0.17	0.13
2	0.16	0.90	0.68	0.54	0.44	0.34	0.26
3	0.24	1.35	1.02	0.81	0.66	0.51	0.39
4	0.32	1.80	1.36	1.08	0.88	0.68	0.52
5	0.4	2.25	1.70	1.35	1.10	0.85	0.65
6	0.48	2.70	2.04	1.62	1.32	1.02	0.78
7	0.56	3.15	2.38	1.89	1.54	1.19	0.91
8	0.64	3.60	2.72	2.16	1.76	1.36	1.04
9	0.72	4.05	3.06	2.43	1.98	1.53	1.17
10	0.90	4.50	3.4	2.7	2.2	1.7	1.3

IBA-k		650ppm	750ppm	850ppm	1000ppm	2000ppm	4000ppm
SCOOPS	GRAMS	LITRES	LITRES	LITRES	LITRES	LITRES	LITRES
1	0.08	0.1	0.09	0.08	0.065	0.033	0.016
2	0.16	0.2	0.18	0.16	0.13	0.066	0.032
3	0.24	0.3	0.27	0.24	0.195	0.099	0.048
4	0.32	0.4	0.36	0.32	0.26	0.132	0.064
5	0.4	0.5	0.45	0.4	0.325	0.165	0.08
6	0.48	0.6	0.54	0.48	0.39	0.198	0.096
7	0.56	0.7	0.63	0.56	0.455	0.231	0.112
8	0.64	0.8	0.72	0.64	0.52	0.264	0.128
9	0.72	0.9	0.81	0.72	0.585	0.297	0.144
10	0.90	1	0.9	0.8	0.65	0.33	0.16

Water Soluble NAA Instructions
Naphthalene acetic acid NAA-NA 98%

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Difficult to root varieties 5000-20000ppm/b NAA.

NAA		125ppm	150ppm	175ppm	200ppm	250ppm	300ppm
SCOOPS	GRAMS	LITRES	LITRES	LITRES	LITRES	LITRES	LITRES
1	0.055	0.436	0.363	0.311	0.272	0.218	0.182
2	0.11	0.872	0.726	0.622	0.544	0.436	0.364
3	0.165	1.308	1.089	0.933	0.816	0.654	0.546
4	0.22	1.744	1.452	1.244	1.088	0.872	0.728
5	0.275	2.18	1.815	1.555	1.36	1.09	0.91
6	0.33	2.616	2.178	1.866	1.632	1.308	1.092
7	0.385	3.052	2.541	2.177	1.904	1.526	1.274
8	0.44	3.488	2.904	2.488	2.176	1.744	1.456
9	0.495	3.924	3.267	2.799	2.448	1.962	1.638
10	0.55	4.36	3.63	3.11	2.72	2.18	1.82

NAA		400ppm	500ppm	600ppm	1200ppm	2400ppm	4800ppm
SCOOPS	GRAMS	LITRES	LITRES	LITRES	LITRES	LITRES	LITRES
1	0.055	0.13	0.11	0.09	0.045	0.023	0.012
2	0.11	0.26	0.22	0.18	0.09	0.046	0.024
3	0.165	0.39	0.33	0.27	0.135	0.069	0.036
4	0.22	0.52	0.44	0.36	0.18	0.092	0.048
5	0.275	0.65	0.55	0.45	0.225	0.115	0.06
6	0.33	0.78	0.66	0.54	0.27	0.138	0.072
7	0.385	0.91	0.77	0.63	0.315	0.161	0.084
8	0.44	1.04	0.88	0.72	0.36	0.184	0.096
9	0.495	1.17	0.99	0.81	0.405	0.207	0.108
10	0.55	1.3	1.1	0.9	0.45	0.23	0.12

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