

Holy Grail Dry Formulation (HGDF) APPLICATION RATES AND METHOD

Updated 13 May 2017

	STAGE	APPLICATION RATES	METHOD
		Basic Dilution: 1.25grams AGRIPOWER HGDF + 1 Liter Water	
	ALMOND	Estimate trees per hectare:400 trees	* per hectare dilution = no of trees x 1.25g HGDF
1	Green Tip to Pink Bud (About 2 weeks before flowering)	500g HGDF with 400 liters water/hectare Soil treatment	Fertigation (1 Liter of dilution/tree)
2	10% of full bloom	250g HGDF with 200 liters water/hectare Soil treatment	Fertigation 500ml of dilution/tree
3	End of Petal Fall	500g HGDF B-Formula with 400 liters water/hectare	Fertigation OR Foliar Spray (1 Liter of dilution/tree)
4	Mid-Nut Development	500g HGDF B-Formula with 400 liters water/hectare	Fertigation OR Foliar Spray (1 Liter of dilution/tree)
5	Post Harvest	500g HGDF with 400 liters water/hectare	Fertigation OR Foliar Spray (1 Liter of dilution/tree)
	PISTACHIOS	Estimate trees per hectare: 300 trees	* per hectare dilution = no of trees x 1.25g HGDF
1	Bud Swell	325g HGDF with 300 liters water/hectare	Fertigation OR Irrigation (1 Liter of dilution/tree)
2	Early Shoot	170g HGDF with 150 liters water/hectare	Foliar Spray OR Fertigation 500ml of dilution/tree
3	Shell Hardening and Early Nut Fill	325g HGDF B Formula with 300 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
4	Post Harvest (While leaves remain active)	325g HGDF with 300 liters water/hectare	Fertigation OR Irrigation (1 Liter of dilution/tree)
	POMEGRANATE	Estimate trees per hectare: 500 trees	* per hectare dilution = no of trees x 1.25g HGDF
1	Bud Swell	320g HGDF with 250 liters water/hectare	Fertigation OR Irrigation 500ml of dilution/tree
2	Early Shoot/Leaf growth	320g HGDF with 250 liters water/hectare	Foliar Spray OR Fertigation 500ml of dilution/tree
3	Lengthening of internodes	625g HGDF with 500 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
4	Appearance of Flower Buds	625g HGDF with 500 liters water/hectare	Foliar Spray OR Fertigation 500ml of dilution/tree
5	End of Petal Fall	625g HGDF B Formula with 500 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
6	Mid-Fruit Growth	625g HGDF B Formula with 500 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
7	Post Harvest	625g HGDF with 500 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
	WINE GRAPES (Vineyard)	Estimate trees per hectare: 1290 trees	
1	Bud Swell	250g HGDF with 200 liters water/hectare	Fertigation OR Irrigation
2	2 to 5 leaves, Shoots up to 10cm	4000g HGDF with 200 liters water/hectare	Foliar Spray OR Fertigation
3	4mm Berries (peppercorn size)	350g HGDF B Formula with 200 liters water/hectare	Fertigation OR Irrigation
4	Prior to Veraison-berries beginning to soften	400g HGDF B Formula with 200 liters water/hectare	Foliar Spray OR Fertigation
5	Post Harvest- Prior to leave fall	250g HGDF with 200 liters water/hectare	Fertigation OR Irrigation
	OLIVE	Estimate trees per hectare: 500 trees	
1	New Tree Planting	320g HGDF with 250 liters water/hectare	Soil Application via boom spray or irrigation 500ml of dilution/tree
2	Early Season (First Growth Flush)	625g HGDF with 500 liters water/hectare	Fertigation OR Irrigation (1 Liter of dilution/tree)
3	Prior to Flowering	625g HGDF with 500 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
4	Early Fruit Set	625g HGDF B Formula with 500 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
5	Post Harvest (Prior to leave fall)	625g HGDF with 500 liters water/hectare	Fertigation OR Irrigation (1 Liter of dilution/tree)
	COFFEE	General application: Spray 250g HGDF with 200 liters water/hectare/month	

1	Early Stage 1 fruit growth (Pinheads)	250g HGDF with 200 liters water/hectare	Foliar Spray OR Fertigation
2	Early Stage 2 Fruit growth (Maturity Index 2)	250g HGDF B Formula with 200 liters water/hectare	Foliar Spray OR Fertigation
3	Veraison to Pink stage (Maturity Index 3-4)	250g HGDF B Formula with 200 liters water/hectare	Foliar Spray OR Fertigation
4	Immediately Post-Harvest	250g HGDF with 200 liters water/hectare	Foliar Spray OR Fertigation
5	Post Harvest (Prior to leave fall)	250g HGDF with 200 liters water/hectare	Fertigation OR Irrigation
	TEA	General application: Spray 250g HGDF with 200 liters water/hectare/20 days	
1	After each flush harvest	250g HGDF with 200 liters water/hectare	Foliar Spray OR Fertigation
2	Every 20 days during growing season	250g HGDF B Formula with 200 liters water/hectare	Foliar Spray OR Fertigation
3	After final flush harvest for the year	250g HGDF with 200 liters water/hectare	Foliar Spray OR Fertigation
	STRAWBERRIES	General application: Spray 250g HGDF with 200 liters water/hectare/20 days	
1	Pre-Soak runners	1:500 solution (1g HGDF with 500 Liters water)	Soak for 6 hours prior to planting
2	Immediately after planting	150g HGDF with 200 liters water/hectare	Soil application via boom spray or irrigation
3	Then every 2 to 3 weeks	250g HGDF B Formula with 200 liters water/hectare	Foliar Spray OR Fertigation
4	Prior to the start of picking	250g HGDF with 200 liters water/hectare	Foliar Spray OR Fertigation
	KIWI	General application: Spray 250g HGDF with 200 liters water/hectare/20 days	
1	Bud burst	250g HGDF with 200 liters water/hectare	Foliar Spray OR Fertigation
2	Fruit set	250g HGDF B Formula with 200 liters water/hectare	Foliar Spray OR Fertigation
3	Fruit filing (Stage 2 fruit growth)	250g HGDF B Formula with 200 liters water/hectare	Foliar Spray OR Fertigation
4	Post harvest prior to leaf fall	250g HGDF with 200 liters water/hectare	Foliar Spray OR Fertigation
	MANGOES	Estimate trees per hectare:155 trees	* per hectare dilution = no of trees x 1.25g HGDF
1	Bud swell	194g HGDF with 155 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
2	Before Flowering	194g HGDF with 155 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
3	After Fruit Set	194g HGDF B Formula with 155 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
4	Post harvest	194g HGDF with 155 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
	ORANGES	Estimate trees per hectare:400 trees	* per hectare dilution = no of trees x 1.25g HGDF
1	Fruit Set to 15mm fruit	500g HGDF with 400 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
2	Beginning of fruit-fill	500g HGDF B Formula with 400 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
3	Early ripening	500g HGDF B Formula with 400 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
4	Post harvest	500g HGDF with 400 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
	WHEAT	General application: Spray 500g HGDF with 200 liters water/hectare/month	
1	10 days after planting	250g HGDF with 200 liters water/hectare	Foliar Spray
2	25 days after planting	500g HGDF with 200 liters water/hectare	Foliar Spray
3	40 days after planting	500g HGDF with 200 liters water/hectare	Foliar Spray
4	After flowering	500g HGDF B-Formula with 200 liters water/hectare	Foliar Spray

5	75 days after planting	500g HGDF B-Formula with 200 liters water/hectare	Foliar Spray
	PAW PAW	Estimate trees per hectare: 1000 trees	* per hectare dilution = no of trees x 1.25g HGDF
1	After planting of a new orchard	625g HGDF with 500 liters water/hectare	Fertigation OR Irrigation 500ml of dilution/tree
2	In new plantations, once adequate new leaf area develops	625g HGDF with 500 liters water/hectare	Fertigation and Foliar 500ml of dilution/tree
3	After Fruit set	1250g HGDF B Formula with 1000 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
4	At the beginning of each active growth phase	1250g HGDF B Formula with 1000 liters water/hectare	Foliar Spray OR Fertigation 500ml of dilution/tree
5	After selection of Ratoon (sucker)	1250g HGDF with 1000 liters water/hectare	Fertigation And Foliar (1 Liter of dilution/tree)
6	Then continue as for plant crop	1250g HGDF with 1000 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
	BANANA	Estimate trees per hectare: 1000 trees	* per hectare dilution = no of trees x 1.25g HGDF
1	Planting area (soil) prior to planting	625g HGDF with 500 liters water/hectare	Fertigation OR Irrigation
2	1 week after planting	625g HGDF with 500 liters water/hectare	Soil and Foliar application 500ml of dilution/tree
3	Once adequate leaf area develops	1250g HGDF with 1000 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
4	3 months prior to bunch formation	1250g HGDF B Formula with 1000 liters water/hectare	Foliar Spray OR Fertigation 500ml of dilution/tree
5	After selection of Ratoon (sucker)	1250g HGDF with 1000 liters water/hectare	Fertigation OR Foliar (Soil application)
6	Then continue as for plant crop	1250g HGDF with 1000 liters water/hectare	Soil application via boom spray or irrigation (1 Liter of dilution/tree)
	GUAVA	Estimate trees per hectare:135 trees	* per hectare dilution = no of trees x 1.25g HGDF
1	Bud swell	170g HGDF with 135 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
2	Before Flowering	170g HGDF with 135 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
3	After Fruit Set	170g HGDF B Formula with 135 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
4	Post harvest	170g HGDF with 135 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
	APPLE	Estimate trees per hectare: 988 trees(400trees/acre)	* per hectare dilution = no of trees x 2.5g HGDF
1	After Apple trees push bud	2.47kg HGDF A-Formula with 988 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree via drip inside root zone)
2	After Bloom	2.47kg HGDF A-Formula with 988 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree via drip inside root zone)
3	After Fruit set	2.47kg HGDF B-Formula with 988 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree via drip inside root zone)
4	Post harvest- prior to leaf fall	2.47kg HGDF A-Formula with 988 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree via drip inside root zone)
	CHERRY	Estimate trees per hectare: 800 trees	* per hectare dilution = no of trees x 1.25g HGDF
1	Frut set to 5mm fruit	1kg HGDF with 800 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
2	Beginning of fruit-fill	1.5kg HGDF B Formula with 2,225 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
3	Early ripening	1.5kg HGDF B Formula with 2,225 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
4	Post harvest- prior to leaf fall	1kg HGDF with 800 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
	PEAR	Estimate trees per hectare: 300 trees	* per hectare dilution = no of trees x 1.25g HGDF
1	Frut set to 15mm King fruit	375g HGDF with 300 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
2	Beginning of fruit-fill	400g HGDF B Formula with 300 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)

3	2-3 weeks prior to harvet	400g HGDF B Formula with 300 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
4	Post harvest- prior to leaf fall	375g HGDF with 300 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
	PEACH	Estimate trees per hectare: 200 trees	* per hectare dilution = no of trees x 1.25g HGDF
1	Frut set to 15mm King fruit	250g HGDF with 200 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
2	Beginning of fruit-fill	300g HGDF B Formula with 200 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
3	2-3 weeks prior to harvet	300g HGDF B Formula with 200 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
4	Post harvest- prior to leaf fall	250g HGDF with 200 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
	PAPAYA	Estimate trees per hectare: 1000 trees	* per hectare dilution = no of trees x 1.25g HGDF
1	After planting of a new orchard	625g HGDF with 500 liters water/hectare	Fertigation OR Irrigation 500ml of dilution/tree
2	In new plantations, once adequate new leaf area develops	625g HGDF with 500 liters water/hectare	Fertigation and Foliar 500ml of dilution/tree
3	After Fruit set	1250g HGDF B Formula with 1000 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
4	At the beginning of each active growth phase	1250g HGDF B Formula with 1000 liters water/hectare	Foliar Spray OR Fertigation 500ml of dilution/tree
5	After selection of Ratoon (sucker)	1250g HGDF with 1000 liters water/hectare	Fertigation And Foliar (1 Liter of dilution/tree)
6	Then continue as for plant crop	1250g HGDF with 1000 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
	ONIONS	General application: Spray 350g HGDF with 200 liters water/hectare/month	
1	2 to 3 days before planting	350g HGDF with 200 liters water/hectare	Spray into soil (planting area)
2	Between sowing and Hook stage 10 days after planting	350g HGDF with 200 liters water/hectare	Foliar Spray
2	Three leaf stage 25 days after planting	350g HGDF B Formula with 200 liters water/hectare	Foliar Spray
NB	Use an appropriate wetter for all foliar applications due to the very waxy nature of onion leaves.		
	SPINACH	General application: Spray 350g HGDF with 200 liters water/hectare/month	
1	2 to 3 days before planting	350g HGDF with 200 liters water/hectare	Spray into soil (planting area)
2	10 days after planting	350g HGDF with 200 liters water/hectare	Foliar Spray
3	25 days after planting	350g HGDF B Formula with 200 liters water/hectare	Foliar Spray
	CORN/MAIZE	General application: Spray 350g HGDF with 200 liters water/hectare/month	
1	Immediately after sowing	350g HGDF with 200 liters water/hectare	Spray into soil around sowed area
2	3 to 4 leaf stage	350g HGDF with 200 liters water/hectare	Foliar Spray
3	Inflorescence beginning to emerge	350g HGDF with 200 liters water/hectare	Foliar Spray
4	40 days after sowing	350g HGDF B Formula with 200 liters water/hectare	Foliar Spray
	COTTON	General application: Spray 350g HGDF with 200 liters water/hectare/month	
1	7 to 10 days after sowing	350g HGDF with 200 liters water/hectare	Spray into soil around sowed area via boom spray or irrigation
2	3 to 4 leaf stage	350g HGDF with 200 liters water/hectare	Foliar Spray OR Fertigation
3	5 -7 days before flowering	350g HGDF with 200 liters water/hectare	Foliar Spray OR Fertigation
4	At the start of flowering	350g HGDF B Formula with 200 liters water/hectare	Foliar Spray OR Fertigation

	SOY BEAN	General application: Spray 500g HGDF with 200 liters water/hectare/month	
1	10 days after planting	350g HGDF with 200 liters water/hectare	Foliar Spray
2	25 days after planting	500g HGDF with 200 liters water/hectare	Foliar Spray
3	40 days after planting	500g HGDF with 200 liters water/hectare	Foliar Spray
4	After Flowering	500g HGDF B-Formula with 200 liters water/hectare	Foliar Spray
5	75 days after planting	500g HGDF B-Formula with 200 liters water/hectare	Foliar Spray
	TOMATO	Plants per hectare >18,280	
1	Initial Soil Preparation	500g HGDF with 200 liters water/hectare	Soil application prior to bed forming or final seed-bed preparation
2	Immediately after sowing or transplanting	800g HGDF with 200 liters water/hectare	Soil application via bom sprayer or fertigation
3	As the first flower clusters begin to develop	800g HGDF B Formula with 200 liters water/hectare	Soil application via bom sprayer or fertigation Also Spray lightly on plants, avoid spraying flowers
4	Every 2 weeks thereafter Last spray 1 week before harvest	800g HGDF B Formula with 200 liters water/hectare	Soil application via bom sprayer or fertigation Also Spray lightly on plants, avoid spraying flowers
	CASSAVA		
1	2 to 3 days before planting	350g HGDF with 200 liters water/hectare	Spray into soil (planting area)
2	4 weeks after planting	350g HGDF with 200 liters water/hectare	Foliar Spray plant and on the soil
3	8 weeks after planting	350g HGDF B Formula with 200 liters water/hectare	Foliar Spray plant and on the soil
4	16 weeks after planting	350g HGDF B Formula with 200 liters water/hectare	Foliar Spray plant and on the soil
	CABBAGE	General application: Spray 350g HGDF with 200 liters water/hectare/month	
1	2 to 3 days before planting	350g HGDF with 200 liters water/hectare	Spray into soil (planting area) Mix well by rotavation
2	10 days after planting	350g HGDF with 200 liters water/hectare	Foliar Spray on the plant and soil on the outer sides of cabbage rows about 6 inches from the plant
3	Immediately after transplant or 6 leaf stage	350g HGDF with 200 liters water/hectare	Foliar Spray on the plant and soil on the outer sides of cabbage rows about 6 inches from the plant
4	Prior to buttoning	350g HGDF with 200 liters water/hectare	Foliar Spray on the plant and soil on the outer sides of cabbage rows about 6 inches from the plant
5	Every 3 weeks thereafter	350g HGDF B Formula with 200 liters water/hectare	Foliar Spray on the plant and soil on the outer sides of cabbage rows about 6 inches from the plant
	RICE	General application: Spray 800g HGDF with 200 liters water/hectare/month	
1	1 to 2 days before sowing	800g HGDF with 200 liters water/hectare	Spray into soil (planting area) Mix well by rotavation
2	10 days after planting	500g HGDF with 200 liters water/hectare	Foliar Spray
3	25 days after planting Onset of tillering	800g HGDF with 200 liters water/hectare	Foliar Spray
4	45 days after planting Panicle initiation	800g HGDF with 200 liters water/hectare	Foliar Spray
5	After flowering	800g HGDF B-Formula with 200 liters water/hectare	Foliar Spray
6	After fruit set	800g HGDF B-Formula with 200 liters water/hectare	Foliar Spray
6	Last spray 20 days before harvest	800g HGDF B-Formula with 200 liters water/hectare	Foliar Spray
	Oil Palm (Age)	Palms per hectare = 135	
1	1st year	3kg HGDF with 135 liters water/hectare x 2 applications per year(6 months once)	Foliar Spray palm and on the soil 1 Liter of dilution per palm
2	2nd year	4kg HGDF with 135 liters water/hectare x 2 applications per year(6 months once)	Foliar Spray palm and on the soil 1 Liter of dilution per palm

3	3rd year onwards	5kg HGDF with 135 liters water/hectare x 1 application	Foliar Spray palm and on the soil
		5kg HGDF B Formula with 135 liters water/hectare x 1 application	1 Liter of dilution per palm
		Note: split the A and B formula 6 months gap	
	BLUEBERRIES	Estimate trees per hectare: 1,630 trees	* per hectare dilution = no of trees x 1.25g HGDF
1	Immediately after harvest	2kg HGDF with 1,630 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
2	Tight clusters to early pink bud	2kg HGDF with 1,630 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
3	Petal fall to early Green fruit	2kg HGDF B Formula with 1,630 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
4	25% Blue fruit color	2kg HGDF B Formula with 1,630 liters water/hectare	Foliar Spray OR Fertigation (1 Liter of dilution/tree)
	MELONS & PUMPKIN		
1	Initial Soil Preparation	500g HGDF with 200 liters water/hectare	Soil application prior to bed forming or final seed-bed preparation
2	Immediately after sowing or transplanting	500g HGDF with 200 liters water/hectare	Soil application via boom sprayer or fertigation
3	As the first flower clusters begin to develop	500g HGDF B Formula with 200 liters water/hectare	Soil application via bom sprayer or fertigation Also Spray lightly on plants, avoid spraying flowers
4	Every 2 weeks thereafter Last spray 1 week before harvest	500g HGDF B Formula with 200 liters water/hectare	Soil application via bom sprayer or fertigation Also Spray lightly on plants, avoid spraying flowers