Jiffy-7C°













According to the Oxford Concise Dictionary hydroponic growing means:

Hydroponics n. soilless culture, art of growing plants without soil, in (sand, etc. containing) water impregnated with nutrients. [f. HYDRO-+Gk ponos labour].

There are number of options to choose from when moving from soil bound cultures to hydroponics. Why should a grower take our Jiffy coir products? There are a number of advantages coir has when discussing these options with the grower.

Product Qualities Coir

- Easy re-saturated with water
- Stable substrate if thoroughly composted / high Lignin
- High air-content, even when fine structured
- Fibres and/or husk chips further increase airiness
- Water-air-content positive compared to peat
- Easy mixable with peat
- Organic origin. Recyclable after use
- Perfect alternative for 'peat-free' demands

When the grower has decided in favour of coir, why should he or she buy Jiffy coir?

USP's Jiffy Coir

- Full control from husk to end product (end user)
- RHP-approved from the production location onwards
- **OMRI-listed**
- Experience in all major horticultural areas with a variety of cultures
- Total hydroponic range: Jiffy 7C, Grow Block, Grow Bag
- Worldwide operational Sales Team with professional advisors
- Jiffy Brand with horticultural knowledge based on >50 years experience



Jiffy-7C

General directives for the use of coir

Coir has a water buffer. Coir acts as a dry medium. Checking the weight of the individual pellet after expansion can be a useful method to be sure that all pellets are equally prepared.

Coir has a loose, airy structure. A better air/water-content improves root development. The finer structure you choose, the wetter the pellet reacts. An airier substrate means a drier substrate. All this simplifies irrigation. Some seeds do better with a wetter pellet, while some cuttings do better with more airy coir. Ask your Jiffy representative for advise.

General guidelines for germinating seeds on coir

In general we can conclude that coir is a powerful growing medium. Crucial for a proper germination of a seed is humidity. If too dry the seeds will not germinate at all. Be aware of this all times. If you are used to cover the seeds in the early stage, you should do this while using J7C too. Here J7C are no different than any other growing media. After the germination you can follow your procedures to propagate the proper seedling stage. As coir is airier than most of the used peat mixtures you should manage your irrigation with slightly less water per shift but with a higher frequency. The given volume at the end of the day is no different to other growing media. Ask your Jiffy representative for advise.

General guidelines for propagating cuttings in coir

In general we can conclude that coir is a powerful growing medium. Crucial for the fastest root development again is humidity. If too dry the callus will not be formed. If too wet the cutting can start to rotten at the tip. As for the seeds our J7C is no different than any other growing media for cutting propagation. As coir is airier than most of the used peat mixtures you should manage your irrigation with slightly less water per shift but with a higher frequency. The given volume at the end of the day is no different to other growing media. Ask your Jiffy representative for advise.

Specifications J7C

J7C pellets can be produced with tailor-made specifications like prepared sticking holes, pre-loaded in growing trays or even pre-spaced in these trays. Broad variety of dimensions meeting any globally applied growing systems. Standard supplied with special fertilizer mix and pellet covered with a biodegradable netting which is easy to penetrate for the roots, but will keep the root ball together when being transplanted.

Expansion and irrigation

As mentioned above irrigation depends on the purpose of the pellet. First expansion is a standard procedure. The needed amount of water to expand the pellets properly depends on its dimension. A guideline is to use 80% of the end volume of a single plug for fully expansion with no drain. When using mesh tables or trays on uncovered floors we advise to rain the pellets overhead. If treated in the proper way the pellets should expand easily and reach their maximum volume within 5-8 minutes, again depending on the dimensions. The bigger the pellet, the longer it will take. Best way for a guaranteed expansion is to use the Jiffy Expandomatic. Ask your Jiffy representative for advise.

Fertilization

See attached fertilizing schedules for tomato, pepper, cucumber and rose (end of document)



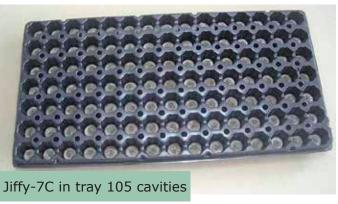
Preparing J7C coir pellets

- 1. Prepare your tray(s). If re-used: be sure that the trays are clean and if necessary sterilized. If supplied in trays go to step 3.
- 2. Take the cartons with J7C pellets and put a single pellet in each cell of your tray. Place the opening (sticking or seed hole) upwards
- 3. Prepare the trays with the J7C by watering the pellets thoroughly for expansion. Inform for the possibilities to do this mechanically with our Jiffy Expandomatic
- **4.** Be sure that the water for rewetting is not too cold: warmed up to 20°C (68°F) speeds up expansion. With water at 40°C (104°F) it only takes 8 - 10s for proper expansion
- **5.** Shower the trays with the pellets top down (if done manually) and leave the trays in a small layer of water (contact with the pellet is crucial here) for a while to improve expansion and save time
- **6.** Seed the pellets or add the cuttings in the precut holes. When used for propagation put the cutting in a firm handling into the pellet. Do not move it around. Be sure that the cutting is positioned firmly. The looser it is transplanted the lesser fast its roots will develop

- **7.** Transport the trays to the propagation room (concrete ebb-flow floor or table system)
- 8. Jiffy 7C coir plugs contain less 'Easy Available Water' than loose fill peat, paperplugs or stonewool plugs (EAWcoir=1/2 EAWstonewool), so add water more frequently but with smaller volumes compared to your standard
- 9. At the start: add water with a lower EC-level to the J7C pellets as the basic material is fertilized
- 10. Research has shown that a Jiffy 7C pellet is easier to manage compared to the alternative plug systems. There is actually no building up of salts and you can add water more frequently

To safe guard a healthy culture we advise your customer to take coir or drain water samples on a regular base to avoid (too) low or (too) high nutrient levels.









Jiffy / Visser Expandomatic

Jiffy-7C°



Optimum Rooting

The Jiffy-7C is the perfect substrate for crops being propagated under stressing conditions or for crops requiring a high level of air-porosity in the substrate. Crops such as Poinsettia are well suited to this medium as high volumes of water can be applied to keep cuttings turgid, without the danger of water logging in the substrate.

A specially formulated base fertiliser gives plants the best start without the need for further application until later in the production cycle.

As many crops requiring such high air porosity in the substrate are grown on the verge of drought conditions, Jiffy has incorporated a specially designed wetting agent to allow fast and uniform re-wetting of the substrate should it be allowed to become over-dry.

Peat Free

Jiffy-7C is the only peat free discrete propagation plug on the market, offering growers in peat-free or

reduced peat production the same rooting and handling advantages as peat based discrete plugs.

Manufactured entirely from coir pith, a by-product of the coconut industry, the Jiffy-7C makes use of this abundant waste material, to create an environmentally friendly product. As the Jiffy-7C is a compressed product, the environmental impact of shipping the finished product is greatly reduced. Production of the Jiffy-7C is rigorously monitored at our facility at the coir source in Sri Lanka to maintain a consistently high quality and uniformity.

Extensive Range

Seven plug sizes available, from 25mm to 50mm diameter and heights from 28mm to 60mm either loose in cartons or pre-loaded in a range of growing trays. Tray options range from 25 cell strips to 126 cell full size growing trays. Plugs can also be prespaced in the growing trays, ensuring there is a Jiffy-7 to suit all crops and growing requirements.

Convenience

In common with the rest of the Jiffy-7 range, Jiffy-7C is supplied in a dried compressed form allowing the grower to store unused plugs until the next crop cycle without wastage. Efficient storage on the nursery is also a benefit as the Jiffy-7C occupies less than 1/4 of the space of other discrete plugs. The plugs are easily re-hydrated ready for use, by hand or during the normal irrigation cycle.



For further information or to arrange a trial of Jiffy-7C please contact your area manager or use the contact options below



Manufactured from Coir pith, the Jiffy-7C follows the proven Jiffy-7 pellet format & offers a peat free, open structured substrate that provides a highly versatile & cost efficient propagation plug.

Jiffy Products International BV

Tel.: +31 168 41 35 55 E-mail: sales@jiffygroup.com

www.jiffygroup.com

It's all about the roots

Jiffy Products of America Inc.

Toll Free 1-800-323-1047 (North America only) E-mail: prosales@jiffygroup.com

www.jiffygroup.com



Target values, standard and start schedules for rose on Jiffy coir

Prepared by BLGG, Naaldwijk, The Netherlands

Main Elements Target values Standard schedule Start schedule Jiffy coir NH ₄ <0,2 1,0 0,5 K 2,2 4,0 3,5 Na <2,5 3,5 4,0 Mg 1,1 1,4 1,4 NO ₃ 4,6 10,5 10,4 CI <2,5 5 10,4 CI <2,5 5 1,5 HCO ₃ <0,1 7 1,5 1,5 HCO ₃ <0,1 7 1,25 1,25 Spore elements 5 25 25 25 Mn 1,0 5,0 5,0 3,5 B* 16,0 20 20 20 Cu 1,0 0,75 0,75 Mo 0,5 5,5 5,5 FC 1.0 1.6 1.8				
K 2,2 4,0 3,5 Na <2,5	Main Elements	Target values	Standard schedule	Start schedule Jiffy coir
Na <2,5	NH ₄	<0,2	1,0	0,5
Ca 2,5 3,5 4,0 Mg 1,1 1,4 1,4 NO3 4,6 10,5 10,4 CI <2,5	K	2,2	4,0	3,5
Mg 1,1 1,4 1,4 NO3 4,6 10,5 10,4 CI <2,5	Na	<2,5		
NO3 4,6 10,5 10,4 CI <2,5	Ca	2,5	3,5	4,0
CI	Mg	1,1	1,4	1,4
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	NO ₃	4,6	10,5	10,4
HCO3 <0,1	CI	<2,5		
P 0,8 1,25 1,25 Spore elements Fe 12,5 25 25 Mn 1,0 5,0 5,0 Zn 1,4 3,5 3,5 B* 16,0 20 20 Cu 1,0 0,75 0,75 Mo 0,5 0,5 Ph 5,0 5,5 5,5	SO ₄	1,7	1,5	1,5
Spore elements Fe 12,5 25 25 Mn 1,0 5,0 5,0 Zn 1,4 3,5 3,5 B* 16,0 20 20 Cu 1,0 0,75 0,75 Mo 0,5 0,5 Ph 5,0 5,5 5,5	HCO ₃	<0,1		
Fe 12,5 25 25 Mn 1,0 5,0 5,0 Zn 1,4 3,5 3,5 B* 16,0 20 20 Cu 1,0 0,75 0,75 Mo 0,5 0,5 Ph 5,0 5,5 5,5	Р	0,8	1,25	1,25
Mn 1,0 5,0 5,0 Zn 1,4 3,5 3,5 B* 16,0 20 20 Cu 1,0 0,75 0,75 Mo 0,5 0,5 Ph 5,0 5,5 5,5	Spore elements			
Zn 1,4 3,5 3,5 B* 16,0 20 20 Cu 1,0 0,75 0,75 Mo 0,5 0,5 Ph 5,0 5,5 5,5	Fe	12,5	25	25
B* 16,0 20 20 Cu 1,0 0,75 0,75 Mo 0,5 0,5 Ph 5,0 5,5 5,5	Mn	1,0	5,0	5,0
Cu 1,0 0,75 0,75 Mo 0,5 0,5 Ph 5,0 5,5 5,5	Zn	1,4	3,5	3,5
Mo 0,5 0,5 Ph 5,0 5,5 5,5	B*	16,0	20	20
Ph 5,0 5,5 5,5	Cu	1,0	0,75	0,75
	Мо		0,5	0,5
FC 1.0 1.6 1.8	Ph	5,0	5,5	5,5
	EC	1,0	1,6	1,8

NH₄, K, Na, Ca, Mg, No₃, CI, SO₄, HCO₃ and P Fe, Mn, Zn, B, Cu and Mo

in mmol/l in µmol/l in mS/cm