Growing Giant vegetables, Peter Glazebrook. Midland Branch.

GROWING HEAVY ONIONS (or at least trying to)

Introduction

My interest started in the late 80's and with varying success has continued until the present day. During this time the trimmed (specification for the World Record) onion weight has increased from 6lb 14.5oz in 1985 to 16lb 8oz in 2005, (almost 10lb in 20years) if we are able to continue at this rate a 20lb onion is not far away ?

Brief History

My first real improvement came about after being able to visit Vin Throup's garden in June 1990. It was clear that I needed larger plants earlier in the season. (easier said than done) However won Harrogate in 1991 with 10lb 9.5oz.

I was able to keep in touch with winners and current world record until Mel Ednie shattered this in 1995 lifting the record almost 25%. I think he was helped by his friend Bill Rodger who is well know for large onions. Being able to visit his garden soon afterwards it was clear that his growing was quite sophisticated using heating, lighting, forced ventilation etc.

Mel Ednie



He felt that further benefit was obtained by the longer days being further North in Scotland and cooler coastal climate.

No one came anywhere near this record for many years and I struggled to grow more than 11lb+

Billy Lamb emerged as the grower to beat particularly at Ashington which was for an 'as grown' onion, he was able to keep a heavy green top fresh until this late show, again perhaps due to cooler NE coastal location.

Billy Lamb growing greenhouse



I was fortunate to visit Billy's allotment garden on three occasions during this period usually in July and was amazed at how large healthy and fresh his onions were, without any apparent heating or lighting once planted out in his home made, polythene covered, growing greenhouse.

He had clearly been continually selecting/improving and saving his own seed and finally made it available to others for the 2005 season. Sadly Billy has since died.

John Sifford from near Birmingham shot to the top in this year setting the current world record of 16lb 8oz. I had shown at the Midland Pot Leek show for years and knew John as a good onion grower and competitor, but had not been able to visit his garden until a week before Harrogate and the new W/R.

John Sifford



Like Mel, John's growing methods were quite sophisticated using lighting, heating, forced ventilation in his greenhouse and growing area, which were raised beds inside a high homemade, large plastic/polythene covered structure, with almost fully removable sides.

In one area his own strain onions and in the other, larger ones of the Lamb strain. What appeared to be the heaviest of many was growing through black&white polythene in existing soil enriched, so I was told, by dried bagged manure from a garden centre and a product called 'Rootblast' (2.1.2 granular slow release) was forked into the planting hole. Anyway it worked, although the foliage of the onions had almost given up.

John died the following spring so we will never know if he could have repeated these weights.

Everyone including myself expected him to win Ashington, but this was not to be, instead it was won by Albert Attwell with a fresh topped bulb weighing 16lb 8.5oz as grown.

Albert lives in the East Midlands in the next county to me, so again I was fortunate to be able to visit the week after. Lighting/heating in his greenhouse at home but onions grown in large tunnel on his allotment. Raised bed with fresh imported topsoil, made into a John Innes type mix. Planted early with heating provided by propane gas.



Albert is still keen to grow a larger onion but has been set back by vandals setting fire to his tunnel and destroying his plants during a recent summer. Now established on a more secure site, so it will be interesting to see the results.

There was a common factor in their success, independently they had both obtained from the NE, Lamb early sown (estimated early Oct.) plants in Nov. with three true leaves.

My Growing Method

The World Record now being held in the Midlands proved that location was not the restricting factor I had supposed, so it gave me fresh heart to try again seriously, eventually in 2008, 2009 and 2010 I was able to win Harrogate – but still well below the W/R.

Propagation

Wanting 30 onions to plant out I will sow at least 100 seeds in small seed trays of F2S, placed in a propagator, Oct/Nov. Once they start to appear all moved under a bank of Fluorescent lights which are on 24hrs every day. These are set in a homemade growth cabinet in the garage. Removed from

propagator and potted on as necessary they will stay there for 5.5 - 6 wks. By which time the best will be in 5" pots of Levington M3 compost with 5 leaves supported upright by split canes and clips.

24hr cabinet



Greenhouse

They are now moved into a heated greenhouse under high pressure sodium supplementary light, running for 9hrs during the day. Trying to maintain space heating at 8-10oC not easy with the severe frosts last winter. Standing on a heat mat so have to be careful that base roots are not drying out.

Greenhouse



Potting on now into M3/John Inness no3 compost, by mid Jan. into 9ltr with more JI3 compost. Only the best potted on weaker plants discarded.

While in the greenhouse the light has been extended 15mins every 2wks. to make the plants think they are growing on into spring.

I gave the onions increased Co2 levels last year by running a propane heater at the recommended intervals. Normal levels are 300ppm and plants benefit with levels of 1000-1500ppm during the day.

Later in the winter on sunny days more air changes occur and this level is not maintained, so no point in running the gas. Space heating is by electric fan heater.

Growing Area

I have been growing in two 10ft x 15ft tunnels each with 10 homemade bottomless barrels; the compost in these was emptied outside in Oct. to allow winter rains to flush it through. Soil test taken in late Feb. and fert. added as recommended before refilling barrels.

Last year I erected a third small tunnel inside an existing larger redundant tunnel. This allowed me to prepare for planting earlier in what had been the coldest winter weather for years. The new tunnel has a solid paving slab floor and large 155ltr. Black pots used in lieu of my barrels.

Inside new tunnel



The aim was to provide a clinically clean/uncontaminated environment. Nine of these pots were filled with my own JI3 mix using new sterilised soil and one as a benchmark filled with 6/25ltr bags of commercial JI3. Space heating and forced ventilation by electric. All my tunnels have extra double doors back and front for manual ventilation in the late spring, summer and the new one was fitted

with enviromesh insect screens inside the outward opening doors. I formed a special tunnel frame inside to hang lights/fans etc. and allow a fleece blanket to be pulled over on cold nights.

Planting out and growing on

Planted mid Feb. into pots, lightly watered in and covered soil surface with black and white polythene. Moved greenhouse lights with the plants continuing the fortnightly day extension until the end of March.

Planting out



Removed the old outer polythene cover with the warmer weather on 18th April so that new tunnel would receive more light and could be fully vented. Day length initiates bulbing and this starts around the end of March, but not really noticeable until May. Tremendous growth by early June, watering each pot weekly with 3-5ltr. Onions must not be overwatered. Supported foliage throughout the growing season.

Problems

Started using predator's end of April for Thrip & Spider mite (my main insect problems) they worked o.k. until the end of the hot spell when I found some onions being attached by Spider mites, had to revert to spraying!

Lost one bulb with Botrytis from my other little tunnel and one with Shanking (Bacterial soft rot) otherwise all sound, most had clean white roots (always pleasing) when lifted.

At the end of June and during July we had clear blue skies and high temperatures, onions stop growing at 27oC but they were suffering in 30oC+. Tried green shade netting pulled over the old outer tunnel frame on the sunny side but still could not lower temp's. Obtained a domestic air conditioning unit to no avail, as to be effective air changes have to be reduced i.e. closed tunnel doors, which in turn raises the temp.

Early in the Summer I cored soil samples out of four of my pots filled with my own JI3 mix and sent them away for a standard analysis, to my surprise they came back with a ph of 7.8, I had a retest done but this was still 7.4 - far to high! 6.5 - 7.0 is the aim. Little I could do about it except learn the lesson of having a soil test done of any new soil before starting.

Showing

By mid August many of the onions had suffered from the heat and were finishing, however one near the door, which had been more shaded perhaps, was clearly the freshest and still growing.

Freshest onion



Started showing heavy onions at the end of August/early Sept. But left this one to grow on for Harrogate. Lifted it a day before the show, still with 11 green leaves and it weighed 17lb+ as grown.

Onion prior to lifting



Only 15lb 9oz when trimmed by the judges but fortunately a clear winner and a personal best (as they say) for me.