THE POOH BAH NEWS

Dear Pooh Bah Club subscribers,

As temperatures cool and autumn transitions to winter, it's prime time to prepare your garden to withstand the colder months ahead, and there are plenty of places where gardeners can start.

Tidy up flowerbeds and remove any dead or diseased plants to prevent the spread of pests and diseases. Now is also a great time to mulch the soil with Whoflungdung to insulate plant roots and retain moisture, providing essential protection against frost. Finally, don't forget to bring sensitive plants indoors or provide some cover to prevent any damage.

In this newsletter we showcase the gardens of Barossa Valley Estate, we see some stunning results with Bush Tucker at Sugar Bloom Farm, explore Italy's Bosco Verticale project, and much more.

Stay in touch with Neutrog throughout the month via our social media pages. Our community holds a wealth of information, and our team are always happy to answer any product or garden queries you have.

Happy gardening!
The Neutrog Team

Photo of the Month

Blooming Cattleya Orchid with the Orchid Club of Western Australia

We recently received this photo of Dawn from the Orchid Society of Western Australia with her Cattleya orchid blooming proudly with 31 flowers, and thought it was well deserving of being featured as our 'Photo of the Month' for May.

Cattleya orchids are a diverse and vibrant group of flowering plants known for their stunning blooms and enchanting fragrance. Originating mainly from Central and South America, these epiphytic orchids are prized for their large showy flowers that come in a wide range of colours, including shades of pink, purple, yellow, and white.

They typically grow from pseudobulbs, which store water and nutrients, enabling them to thrive in various environments. Cattleyas are popular among orchid enthusiasts and collectors due to their beauty and the challenge of cultivating them. They require bright, indirect light, ample airflow, and consistent moisture to flourish.

A regular feed with Strike Back for Orchids Advanced Biological Formula provides the necessary nutrients to encourage strong growth and flower development, with the addition of beneficial bacteria and fungi to improve resilience and protection against diseases.

"My go to is Strike Back for Orchids. I prefer to use the liquid version and apply it 'weakly, weekly' at half strength, and add GOGO Juice once a month," says Dawn.

With proper care, Cattleya orchids can bloom multiple times a year, bringing elegance and charm to any indoor or outdoor garden space

About Strike Back for Orchids

Strike Back for Orchids is an organic based, chemically boosted fertiliser specifically developed to enhance the growth and flower development of orchids and all other potted flowering and fruiting plants.

Whilst Strike Back for Orchids can be applied throughout the year, the lower nitrogen to potassium ratio has been specifically designed to enhance the flowering process and hence Strike Back for Orchids should be applied at least from February to October each year.

New Developments Leading to a Strong Future for Neutrog

At Neutrog, we are ramping up our R&D commitment to global food security, investing $3.5 million in a new research and education facility in regional South Australia.

Neutrog MD, Angus Irwin says, "Research and development is an integral part of our company's DNA."

"We have outgrown our existing laboratory and with the increasing demand we are experiencing from our customers and partners we need to position for the future.

While we're investing in our research capabilities, we also want to help educate the industry and broader community on the latest global developments in microbes and biologicals and their increasing value to agriculture and horticulture."

The new research centre will provide significantly increased scope for standalone and partnership R&D projects and to expand our R&D workforce. It will include a BC2-accredited (biosecurity containment level 2 approved) laboratory, making us the only fertiliser business in Australia to have this accreditation, allowing us to receive and process soils sourced from overseas as well as work with human and animal diseases.

Senior Research Assistant, Juhee Hada said the new facilities would allow Neutrog to continue helping farmers and growers meet their production challenges in the future.

The adjacent 80-seat education centre has been custom designed to meet growing interest from school, tertiary, industry, and community groups. It will include interactive multi-media and hands-on learning options, with planned curriculum to align with society, environment, STEM and VET pathways.

Within the development the existing carpark will be repurposed into diverse greenscape in collaboration with national plant societies and with sensory spaces incorporated for additional hands-on learning options for primary school groups.

The announcement of this exciting development coincides with the purchase of a new piece of land in Langhorne Creek, South Australia.

The purchase was finalised in mid April, with a visit by members of our management team to celebrate including Chief Financial Officer Tony Aloisi, Managing Director Angus Irwin, Manager of Special Projects David Ellis, and Manager People and Culture Alicia Oschmanns.

The new land will house the expansion of area for manure storage, allowing Neutrog to keep up with the high demand for premium fertilisers and biologicals.

Farwell to Shane and Rachel

Saying goodbye to people who have been an integral part of the Neutrog team is never easy, and last month we bid farewell to two team members from our production team.

The first person not only waved goodbye to Neutrog but to working life all together. After 17 years with Neutrog, Shane has decided to settle into retirement. Shane tells us he is leaving with a record, having never damaged a single pelleting die (instrument that the manure mixture is forced through to form the pellets).

Over morning tea, we also said goodbye to our Procurement Coordinator, Rachael. After a little over a year with Neutrog, Rachael and her family are taking to the roads to travel around Australia. Its a bittersweet goodbye as we have no doubt that this new adventure will be one of a lifetime.

We would like to thank both Rachael and Shane for their contributions during their time with Neutrog and wish them all the best as they each take on new and exciting phases of life.

A New Engine for the Screener

The future of Neutrog's screener has been assured this month after being fitted with a brand new engine.

The screener was added to the manufacting line in 2019, screening chicken litter that is passed through via a conveyor belt to remove any course material (including straw and wood shavings which is used to form our supermulch). The old engine has seen the screener process a total of 325,000 tonnes of compost in its lifetime.

As you can see in these photos taken by our Maintenance Manager, Paul Elphick, the task of changing the engine required two cranes to lift the 40 tonne machine to an open area. With the new engine in place, the screener is now back in action.

Product of the Month

Rapid Raiser

Having been established for 35 years, Neutrog has expanded and improved its premium biological fertiliser range extensively to ensure we exceed the needs of our customers. There are however a few products that have stood the test of time including one of Neutrog's first ever pelletised fertilisers, Rapid Raiser, a trusted staple among home gardeners and commercial growers alike.

In 2002 alone, as reported in an article for Business Life, Rapid Raiser was Neutrog's flagship product accounting for around 40% of sales, with Bounce Back, Upsurge and Blade Runner following behind. So, what makes Rapid Raiser so highly sought after?

It starts with the ingredients, with its unique blend of organic materials creating a highly concentrated natural product specifically formulated for all fertilising needs to promote faster, healthier, sustained growth for all plants.

Rapid Raiser is composted, and steam treated before being pelletised for simpler and cleaner handling. These processes stabilise the nutrients, maximise nutrient availability and ensure the product is free of any parasites, pathogens and weed seeds. Most importantly, the resultant product retains the microbiology necessary to provide a 'living' fertiliser.

Rapid Raiser is Australian Certified Organic and is widely used by professional horticulturalists throughout Australia in the successful production of commercial crops of vegetables, flowers, fruit and plants. It is used at a number of Botanic Gardens around Australia, and also has a significant presence overseas as part of our export market to countries including Vietnam, Singapore, Korea and Taiwan.

Many home gardeners use Rapid Raiser at part of their pre-plant regime, and as an all-purpose fertiliser over the entire garden.

About Rapid Raiser

Use Rapid Raiser as a pre-plant and a general fertiliser for your whole garden, particularly heavy feeding plants. Incorporate Rapid Raiser into the soil and water in well. Continue to fertilise throughout the season every six to eight weeks.

Rapid Raiser is registered with Australian Certified Organic (ACO).

The Expert's Choice

Barossa Valley Estate

As a defining winery in South Australia's Barossa Valley region, Barossa Valley Estate captures the unique characteristics of Australian warm climate viticulture while offering its guests the chance to wander through Australia's largest perennial garden designed by Paul Bangay.

Together the vineyard, gardens and surrounding lawn areas create an experience to be enjoyed in every season, and to keep them looking their best year-round, they focus on inputs that ultimately benefit soil biology and root health.

Keeping the couch turf green and lush is paramount at Barossa Valley Estate, where lawns are maintained much like a putting green to manage high foot traffic, particularly during the height of Barossa Valley's tourism season which can see up to 200 people visit the cellar door each day.

Regular mows twice per week with a cylinder lawnmower (or automatic lawnmowers affectionately named Romeo and Juliet for the areas adjoining the vineyards) and a yearly renovation combined with applications of Sudden Impact for Lawns + POPUL8 Advanced Biological Formula have formed the basis of their turf management program.

Since using Sudden Impact for Lawns + POPUL8, the team have reported that it works as the name suggests - with a sudden impact. "Other products do a similar job, but if you're looking for an instant green up, Sudden Impact for Lawns delivers."

Along with turf improvements, the perennial gardens are also flourishing after being mulched with Whoflungdung which was specifically chosen for its composting process which rids the mulch of any bad bacteria, resulting in a safe, disease and weed-seed free mulch.

"Whoflungdung has the ability to improve soil at the same time as acting as a mulch by suppressing weeds, and it looks good as well. Whoflungdung doesn't set hard, and really gives a nice lift to the place when you walk in."

Westringia topiary balls have also been treated with POPUL8 to unlock nutrients and improve plant resilience. We look forward to sharing more as this progresses.

We'd like to thank Alistair, Donna, and Michael from Barossa Valley Estate for taking the time to show Neutrog's Commercial Manager, Emily and Commercial Customer Sales Representative, Natasha around the gardens.

The Neutrog R&D team has been working Century Orchards over a number of seasons to explore how biologicals can be used to improve production – and a specific trial relates to the impact of Hull Rot.

Hull rot is a major disease in the almond industry which has a significant effect on the future productivity of an orchard.

Primarily by the fungi Rhizopus stolonifera almonds are susceptible to infection from the early stages of hull split through to harvest where the fungal spores access the inner surface of the hull. This allows the spores to survive and reproduce by accessing the moisture and nutrients present in the hull. From here the spores can spread and quickly infect other areas of the orchard. Hull rot strikes are the first initial sign of hull rot infection and are caused by the acid by-products produced by the fungus, which are then spread through the vascular system of the tree. This causes spur death and twig dieback referred to as 'hull rot strikes', reducing fruiting wood for the following seasons which ultimately reduces the future productivity of the orchard.

Hull rot is generally most prevalent in orchards that have high fertiliser and water input which allows the fungi to thrive. Therefore, at hull split, growers may implement management controls, such as reducing water, to apply a moderate amount of stress to the orchard. This reduces the moisture in the hull available to the fungi and therefore can assist in lowering the prevalence of hull rot. Alternatively, or in conjunction with these management controls, growers may apply a fungicide (such as Merivon) at the beginning of hull split in an effort to protect the tree and crop.

Another option is the use of Potassium silicate (which has many uses in agriculture) but can also be used is also a natural, non-synthetic fungicide. When applied as a foliar spray, the potassium silicate, enters the plant between the epidermal cell layer, creating a silicon matrix and forming a physical protective barrier. This barrier protects the tree from fungal infection by numerous pathogens.

Century Almonds ran a trial in 2021-2022 testing the efficacy of Potassium Silicate for hull rot suppression. In the 2022-2023 season, a more extensive trial was undertaken to assess a range of different products including potassium silicate and Neutrog's biological inhibitor, POPUL8. The trial consisted of five blocks:

- A 'control', sprayed with fungicide (Merivon), to follow the orchard standard for the season.
- Potassium silicate only.
- A combination of Merivon and potassium silicate.
- Potassium silicate and Neutrog's biological hull rot inhibitor.
- A singular application of Neutrog's biological hull rot inhibitor

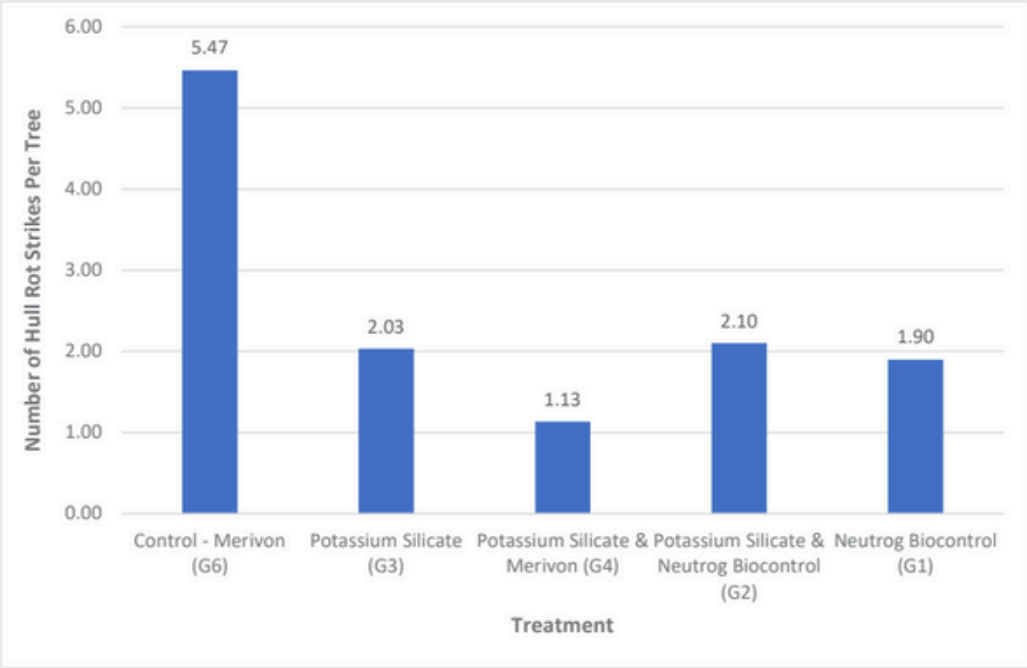

Figure 2. Effect of potassium silicate and Neutrog's Hull Rot Biocontrol product on the number of hull rot strikes per tree compared to the Merivon orchard control.

Results of this trial have shown that potassium silicate, when applied in conjunction with Merivon, is the most effective in significantly reducing the number of hull rot strikes per tree when compared to applying only Merivon, which is standard practice in the orchard. However, the trial also showed that Neutrog's biological inhibitor POPUL8 was the second most effective.

The effect on yield will not be observed until the 2023-2024 season.

The Neutrog R&D team are looking forward to continuing to work with the Century Orchard team.

You may remember from our February newsletter that Neutrog are currently undertaking a trial at the Mount Lofty Botanic Garden to see if the flavour of capsicums and tomatoes can be improved with microbes.

SALIV8 is a formula developed by Neutrog comprising of specifically chosen microbes that the Neutrog R&D team believe will enhance the flavour of produce when added to the soil.
“The ability to enhance flavours, and potentially nutritional value, by the use of a microbial inoculant represents and exciting opportunity not only for the home gardener but also in the commercial setting” Dr Uwe Stroeher, R&D Manager.

Two varieties of each plant have been grown, with two plants of each variety. One plant acts as the control with only water applied, and the remaining plants receiving SALIV8.

Towards the end of March, our R&D team conducted the first round of taste tests by simply cutting up the tomatoes and capsicums for staff to eat and rate on a scale of one to five based on taste and texture. The second round of tasting involved the fruit being blended to allow staff to test the flavour of the produce without the confusion of texture.

"The first round of tasting had mixed results, but the second tasting presented a clear difference in taste between the control and the SALIV8 treated tomatoes and capsicums," says Senior Research Assistant, Juhee.

The most surprising result was seen in the yield of the snack yellow capsicum variety. As you can see in the photo above, the plant treated with SALIV8 not only produced more fruit, but the produce was also of a better quality.

Experiments always include the unexpected, which is what makes the increase in yield of the capsicum one of those positive outcomes.

Juhee tells us that there is one more harvest to test before moving onto larger field trials.

Sugar Bloom Farm

Big Results with Bush Tucker

Taking over an established farm can come with challenges, and as Alecs and John from Sugar Bloom Farms have found out, just a few small changes can have a big effect on yield.

After taking over an established Australian and South African native flower farm a couple of years ago in South Australia's Encounter Bay, Alecs and John found themselves managing land that had previously been maintained with low water and chemical based principles.

"It had been operating for 20 years with a lot of poison, synthetic fertilisers, and low water consumption. The flowers were quite short of stem and low in numbers. Too many flowers were not market grade. We have the production books from every historical year, so we are able to precisely monitor changes in output."

Improving the health of the farm started with the removal of poisons, and all plants have been irrigated to help them cope with the dry summer.

Bush Tucker was applied to each of the plants, providing a complete range of essential nutrients for root development and strong growth - and it didn't take long for them to see significant results.

"Our little flower farm has doubled flower production from the same number of plants in only one year. Stem length has also increased considerably," says Alecs.

On a recent visit, Neutrog's Commercial Sales Representative noted that yield records made last season by the previous owners indicated a harvest of 900 stems. After a single application of Bush Tucker, Alecs and John have increased their yield to 1900 stems.

"We will continue to use your products in the best interests of our plants, the environment, and our bottom line," says Alecs.

International Rose Garden

Garden of Excellence Award

Last month a plaque was unveiled in the International Rose Garden at the Adelaide Botanic Garden to recognise the garden as a Garden of Excellence as awarded by the World Federation of Rose Societies in 2022.

The plaque was officially unveiled by the Governor of South Australia, Her Excellency Frances Adamson AC, with key members of the World Federation of Rose Societies, National Rose Society of Australia and the Rose Society of South Australia. This award is a first for South Australia, and the fifth rose garden to receive this recognition in Australia.

The International Rose Garden displays over 2,700 roses and more than 350 rose cultivars, providing an abundance of colour and perfume to be experienced by visitors.

The garden is also home to the National Rose Trial Garden which tests roses that are not yet commercially available in Australia.

Neutrog congratulates all involved with the International Rose Garden for this astounding achievement.

Bosco Verticale Project

Neutrog in Italy

Neutrog's Helen Lovel is currently on holidays in Italy and on her travels she sent us a message with photos from Milan that included the unbelievable Bosco Verticale, so we immediately went down the internet rabbit hole to find out more about this amazing development.

Described as "a house for trees, inhabited by humans" Bosco Verticale, which means vertical forest, was designed by Boeri Studio, and it consists of two residential skyscrapers — one standing 116 metres tall and the other 84 metres. The dense, living, breathing vertical forest is visually so eye-catching but the real aim with this approach was " to enhance biodiversity and mitigate the urban microclimate.

The skyscrapers, inspired by the Torre Guinigi (in Lucca, Italy which has a rooftop garden featuring seven centuries-old oak trees) are adorned with over ninety plant species, including tall shrubs and trees, distributed across each facade. These lush greenery-covered buildings are an ambitious demonstration of what is possible in metropolitan reforestation, combating urban sprawl and promoting biodiversity.

The Bosco Verticale project (which also includes an 11 storey office building) has been acclaimed in the architectural community. It received the International Highrise Award in 2014 and was hailed by the Council on Tall Buildings and Urban Habitat as the "most beautiful and innovative skyscraper in the world" in 2015. Additionally, it was recognized as one of the "fifty most iconic skyscrapers in the world" in 2019.

If you're ever in Milan, consider searching for Bosco Verticale on Airbnb before you go, as there are apartments available to rent so you could spend a few days soaking up Milan while staying in amongst this amazing building.

Rare Fruit Arboretum

Figs!

A century ago, figs were as esteemed as apples and many people would eagerly pursue and propagate new varieties. They are ideally suited to SA, NSW, VIC and WA climates. The problem is that soft figs are difficult to transport and store, therefore, commercially figs became almost extinct in supermarkets. As a backyard fruit tree though, figs are one of the easiest and most productive to grow.

The Rare Fruit Society of SA (RFSSA) has one of the largest collections of fig varieties in the southern hemisphere which have been gathered from various sources. Before the SA Department of Primary Industries bulldozed their fig collection at Loxton, despite only one day's notice, the RFSSA were able to acquire and propagate cuttings of each of their 18 varieties. This collection is housed in one of the rare fruit arboretums at Neutrog, making all at Neutrog and members of the RFSSA extremely proud to be caring for these unique trees. Members of the RFS also grow many varieties on their properties, ensuring good numbers of trees growing elsewhere as well.

Since this initial collection the RFSSA have collected further material from around Australia. They have new varieties from Perth, Gosford, Darwin, Alice Springs, Mt. Gambier and various old trees collected near farm ruins in SA. Their collection now stands at around 40 varieties making it one of Australia's largest gene-pools. It is important that they keep track of as many of these cultivars as possible, for many were on the verge of being lost completely and many others would have become untraceable.

A number of those acquired from agricultural research stations had lost their original name tags when imported and hence became known by simple names such as R1T3 (i.e. Row 1, Tree 3), which has made identification of duplicates somewhat difficult. R1T3 is in fact a yellow fig with tasty red pulp and highly regarded by members. Netting of trees is undertaken in the arboretum. The goal being that birds do not eat all of the fruit, thus allowing for, hopefully, identification.

Others have more exotic names such as Blue Provence, White Adriatic and Spanish Dessert, again all very good figs. Green Ischia is a hardy, late fig coloured light green with strawberry flesh. It is very fine, sweet and rich; has fewer seeds than most, bears heavily, is naturally dwarfing and hence good for pot culture.

Himalayan is a unique fig, primarily used as a vegetable. It has unusual large, round leaves. It was legally imported by RFSSA member Ben Waddelow over 10 years ago, who discovered the fig being served as a curry in a roadside stall in northern India and obtained scion wood from a University source there.

The figs in the arboretum are all fertilised by the RFSSA members, using Gyganic for Veggies, Fruit & Citrus. GOGO Juice is also applied and all trees are mulched with Whoflungdung. This fertilising program is evident in the health, growth, vigour and fruiting of the trees. Quite remarkable really, when we consider how juvenile they are.

Year round fertilising for year round health

We hope you enjoyed reading this newsletter. If you'd like to stay in touch with Neutrog, we encourage you to like and follow our Facebook and Instagram pages using the links below, and tune into Neutrog TV (hosted by YouTube) where you can find a range of videos as well as copies of Dr Uwe's weekly chats with Graham Ross.

See you in June!
The Neutrog Team

Our Partners

Over the years Neutrog has collaborated with many plant societies that have trialled and subsequently endorsed some of our products. These product endorsements provide retail staff and home gardeners with the confidence to use and recommend Neutrog products.

With a combined membership base of over 10,000, some of these endorsing societies include:

We never have enough room in our newsletters to share all of our inspirational stories and tips from our gardening community, but they do appear on our Facebook and Instagram pages regularly...why not join us there?