

By Andrew Ritchie

“During the past two years we have seen an increase in the sheer volume of farmers from all sectors employing the use of cover crops,” says Maren Ricken, Horticultural Agronomist at Kiwi Seed. “Many are now recognising that soil structure, soil organic content as well as soil fertility cannot be addressed by using fertiliser alone. “Cover crop converts range from dryland pastoral farmers, vegetable growers, dairy farmers and vineyard operators from all over the country. Because of the company’s relationship with a research partnership at Tasglobal Seed comprised of the University of Tasmania and the breeding team at Ardent Seeds it has been able to import a diverse range of new grass, herbs and clover species to New Zealand to suit every environment. “Some of our seed mixes have included up to 25 different species each one designed to improve pasture performance and soil fertility.” From the time of the Romans and ancient Chinese culture it was known that cover crops were beneficial in breaking the cycle of soil borne pests and diseases, limiting erosion, managing weeds, lifting nitrogen levels, enhancing biodiversity and improving soil structure. After the Second World War these practices were largely abandoned due to chemical factories no longer being required to produce ingredients for explosives and instead turning their attention to the manufacture of artificial fertiliser. Chemicals were then required to combat the pests and diseases that began to evolve under the new system.

At this time of year when the country is basking in 30 degree heat and being buffeted by the north west wind it is difficult to turn one’s mind to autumn and the time to achieve the best results from sowing seed. Kiwi Seed have developed an extensive range of plants for dryland conditions including deep tap rooted varieties such as the perennial herb sheep’s burnet, which is winter hardy and drought tolerant. It is low growing and long lived and ideal for inclusion in pasture or under vine and inter row planting in the vineyard. It is able to draw up minerals and trace elements from the subsoil and is very palatable for stock apparently tasting of a mixture of cucumber and melon. Winter active fescues are also useful for inter row planting conserving moisture in summer while maintaining ground cover. Another recent trial has been flying on clover seeds over maize in a dairy situation. Four different varieties of clover were introduced in the month of February and ryegrass was direct drilled into the maize stubble after harvest for silage. The pasture achieved 80% clover content producing 25 units of N per tonne of dry matter and diversity in the sward. In the same area the dairy farmer has broadcast clover amongst his turnip and rape crops achieving substantial savings in fertiliser costs. An idea from the USA has been trialled sowing sunflower amongst maize. One row in four was planted with sunflower resulting in increased energy, protein and oil content in the silage. The sunflowers also improved palatability and uptake of the silage by the cows.

These examples are just a small fraction of the opportunities available to landowners to increase production and improve their soils, while reducing the dependence on fertiliser and chemicals, through the introduction of a variety of plant species supplied through Kiwi Seed. For more information go to the Kiwi Seed website at www.kiwiseed.co.nz or contact Bruce Clark on 0274 322 750 or Maren Ricken on 0274 322 017.