Adjuvants in cereals

Basic treatments in cereals [no. of applications]	Main active substances	Recom- mended adjuvants	Key benefits
pre-emergence herbicides [1]	metribuzin, diflufenican, chlorotoluron, pendimethalin, flurochloridone, flufenacet, prosulfocarb, picolinafen	Atpolan Soil Maxx Premium	 reduced herbicide drift beyond the treated site increased uptake of herbicide by weeds, also in drought reduced leaching of herbicides from the weed germination zone – no crop injury and no environmental pollution improved efficacy of hard to control weeds e.g. common windgrass and slender meadow foxtail higher yields and profits
post-emergence herbicides [2]	flufenacet,lodosulfuron- methyl-sodium, mesosulfuron- methyl, prosulfocarb, picolinafen, chlorotoluron, metribuzin, metsulfuron- methyl, sulfosulfuron, pinoxaden, MCPA,2,4-D, dicamba, tribenuron-methyl, florasulam, fluroxypyr, clopyralid, thifensulfuron, mecoprop-P	Atpolan Bio 80 EC Premium	 higher efficacy of herbicides (10%-30%) and/or possible reduction of rates by 30% high efficacy against difficult to control biotypes, e.g.: biotypes of common windgrass and slender meadow foxtail maintained efficacy of herbicides in adverse weather conditions (esp. drought) no crop injury on adjacent fields and no environmental pollution higher yields and profits
fungicides (e.g. rusts, Tapesia yallundae, Pyrenophora teres, powdery mildew, ramularia, rhynchosporiosis, septoria, take-all, Pyrenophora tritici- repentis) [2,5]	vindiflupyr, cyflufenamid, cyproconazole, cyprodinil, difenoconazole, dimoxystrobin, epoxiconazole, fenpropidin, fenpropimorph, fluoxastrobin, fluxapyroxad, flutriafol, folpet, isopyrazam, mancozeb, metrafenone, metconazole, prochloraz, proquinazid, prothioconazole, pyraclostrobin, spiroxamine, tebuconazole, thiophanate-methyl	Lewar pH⁻ Fungi Premium	 much higher efficacy, especially in adverse conditions (faster, longer and more complete fungicide activity) possible reduction of fungicide rates by 30% while maintaining the same or increasing efficacy level no fungicide drift beyond the crop treated area higher yields and crop quality, higher profits
growth regulators (retardants) [1]	chlormequat chloride, mepiquat chloride, prohexadione-calcium, trinexapac-ethyl	Lewar pH ⁻ Fungi Premium or AS 500 SL	 higher efficacy, including hard water situations possible reduction of rates by 30% in all conditions, including adverse conditions simultaneous increase in efficacy of fungicides and growth regulators used together
insecticides (e.g. aphids, cereal leaf beetle) [1]	acetamiprid, alpha- cypermethrin, beta-cyfluthrin, cypermethrin, deltamethrin, lambda- cyhalothrin, zeta- cypermethrin	Ento Maxx pH⁻ Premium	 20%-30% higher efficacy and a much longer protection period possible reduction of insecticide rates by 30% while maintaining the same high efficacy level up to 20% reduced spray drift – improved safety of insecticide applications higher yields and crop quality, higher profits
spray tank cleaning [3]	-	Clean Max	 safety of the following applications - certainty of no pesticide residues in a spraying systems no crop loss / contamination and resulting compensations prolonged longevity of plant protection equipment lower costs and higher profits

