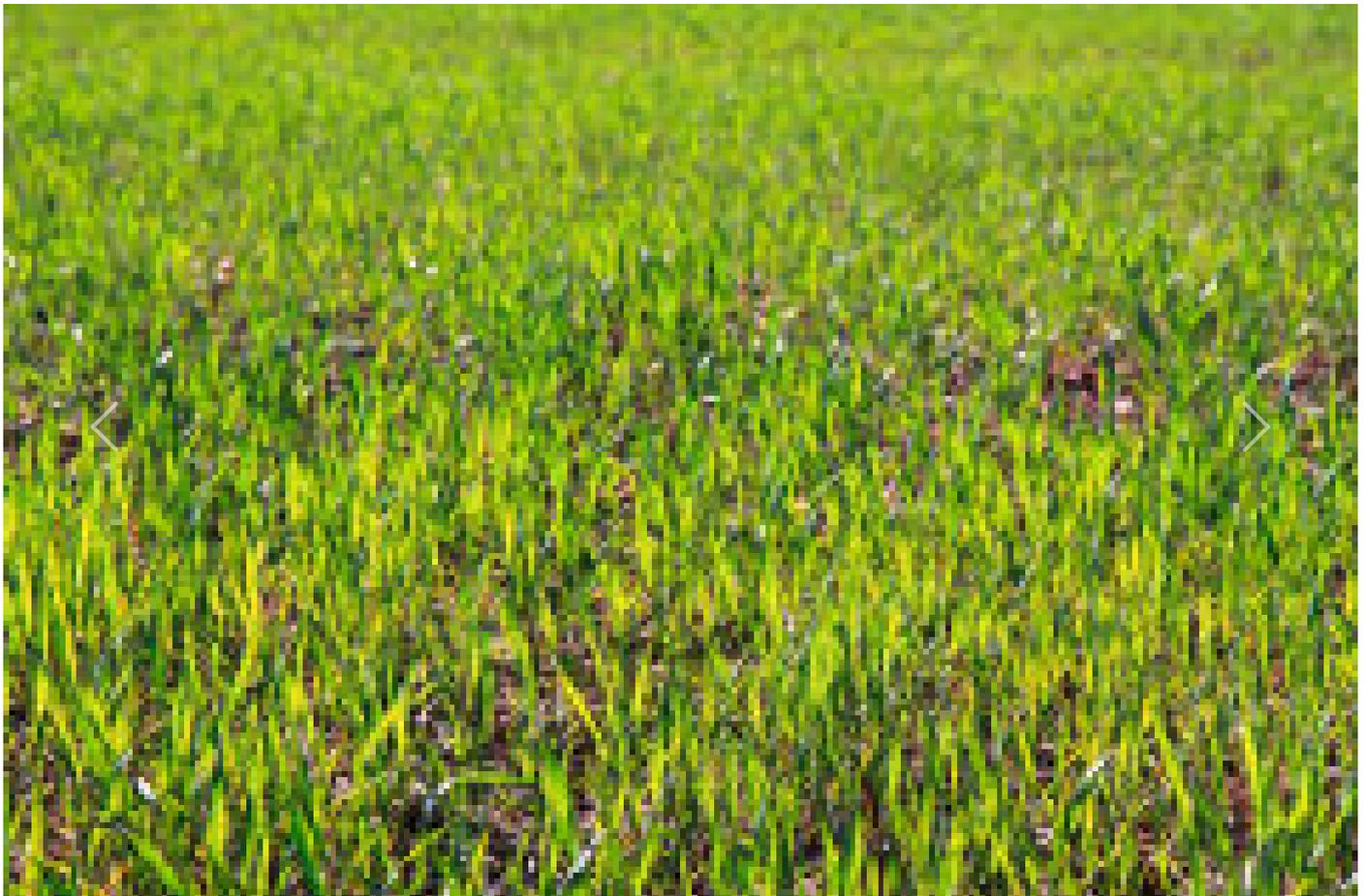


The effect of protecting wheat, barley and rapeseed from pests in spring will limit the yield

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Wheat, barley and rapeseed are the field crops with the longest vegetation period. This biological characteristic, if nothing else, certainly means that attention to their effective protection against harmful organisms – diseases, weeds and pests – must be precise, scientifically justified and maximally accurate. Plant health, ensured for a period of about 9 months under conditions of variable and uncertain biotic and abiotic environmental factors, is the key to achieving maximally high and quality yields from these crops, good profits and a high success index. Spring plant protection practices are part of the overall technological project for achieving sustainable growth in production. What are the trends and options in the individual segments of the complex, multifactor plant protection engineering? We are witnessing that plant protection on a global scale is rapidly entering a qualitatively different environment. What is the profile of this new situation?

Climate change is reshaping the vision, behaviour, activity and actions of harmful organisms. They evolve, change and increase their level of resistance in all directions. Another real threat to ecosystems, terroir and agricultural production is the invasion of alien plant and animal species, facilitated by the free movement of goods and people around the world. There is also a third one, with a domestic address. Totally confused crop rotations and uncontrolled land use complicate the phytosanitary situation. Agricultural production in Bulgaria definitely does not comply with the biological requirements for strict crop rotation, but rather with the market situation and quick profit. Does Bulgarian plant protection practice have the production capacity and professional experience to meet the new challenges? Let us take as an example what is happening in the segment of disease control in cereal crops. The use of fungicides is already a clearly recognised necessity.

The difference is, as some say, from earth to sky! With a successful fungicidal “attack” aimed at prevention against expected infection pressure, several benefits are capitalised. The effect of the product is maximal, resources – time and financial – are saved, and the necessary health result is achieved. But this whole procedure requires agronomic presence, agronomic participation! Any other action outside this scheme is pure over-insurance. In most cases this is shooting in the dark – funds are squandered with no guarantees of a good expected outcome. More than a few cases are known in our country where, due to incompetence and a low level of professionalism, world-class achievements in both agrochemistry and plant breeding have been compromised. Among some of our renowned and popular large tenants and landowners there is a strange notion that agronomic presence is not a mandatory requirement to be a successful farmer. There are large producers who “master the secrets” of plant protection with the help of the omnipresent Internet and endless mobile phone conversations with peers in the sector. This is not serious! In any case, quality plant health cannot be achieved through amateur activities in virtual space. The vulgarisation in this very delicate, knowledge-intensive and responsible field is disastrous! The issue of the glaring need for high professional capacity in plant protection is by no means exhausted by the exotic and disturbing thought processes of one or another major tenant. More important is whether there is a chance and prospects for an entirely ordinary agricultural producer who, for one reason or another, does not have an agronomic education, but strongly wishes and feels the need to be educated in this, according to some, prosaic field. The National Plant Protection Service was in practice crushed, stripped of identity and dismantled by the previous government and now, in its capacity as a sector within the Bulgarian Food Safety Agency, its modest resources are oriented towards market and phytosanitary control and the use of plant protection products in the field. It is hard to believe, but there is one person who is trying to gather the pieces from the devastation and to restore the identity and legitimacy of the state service. In all likelihood, he will not receive support, he will be stopped and they will get rid of his presence. The National Agricultural Advisory Service, formed in the image and likeness of the best European models, is irretrievably discredited. The agricultural institutes within the system of the Agricultural Academy? To our even greater regret, these former scientific units now exist with terrible force only on paper and in... memories. This is despite the fact that both the current Minister of Agriculture and Food and the current President of the Agricultural Academy came to these high

positions from the academic agrarian circles. The research teams (the term “research” is used only for euphony and some prestige, because for at least a quarter of a century in the mentioned institutes science is the last thing that is done there) live with the sole thought, wandering between fragile hope and strong fears as to whether next month they will receive their miserable salaries. What has happened to the Institute of Plant Protection, which is related to the topic of this article, only confirms what has been said so far. As a Member State of the EU, we come to the heavily promoted research strategy for lifelong learning. In seven years of presence in the united European space, Bulgaria has failed to institutionalise this much-vaunted super magic formula for lifelong addiction to the accumulation of knowledge in order to always be up to date and in step with the times. Another question is, if this system is ever really put into operation on Bulgarian soil, how many large-scale tenants and landowners will take advantage of it? Will these people with excessively high self-esteem have the motivation and drive to sit at the “desks” and have someone “pour” agronomic knowledge into them “through a funnel”? Let us also mention something about the employment of agronomic specialists “produced” by the Agricultural University in Plovdiv. It is a fact that in Bulgarian agriculture, engineers, doctors and teachers, taken separately, outnumber agronomists. This phenomenon persistently crushes the agronomic profession and continues not to disturb the respective management institutions, branch organisations (the chairperson and deputy chairperson of the National Association of Grain Producers in Bulgaria, for example, are engineers) and non-governmental formations. It seems that our unknown, modest and nondescript agricultural producer, eager for knowledge, is left only with the technical meetings organised by agrochemical companies both in the field and in conference halls. These events, part of the marketing calendar of plant protection product traders, however, are not educational formats, nor qualification courses, and even less training sessions. They are purely informational panels, demonstrating the qualities, effects, results and advantages of the products of the respective company.

I return to the main topic. The protection of cereal crops and rapeseed in spring is at the starting line. I mentioned disease control in wheat and barley. In this context, I would add that the atypical winter conditions in December and January will maximally provoke the harmful potential for non-traditional manifestations and surprises of any nature and direction. In addition to the activation of the entire infectious background in the autumn cereal stands, there are indications that, given the unusually high temperatures, the weed association may generate additional energy for a powerful restart. The possibility of a calamity of mouse-like rodents should not be excluded – the potential and favourable conditions are present! It is dangerous to neglect the situation regarding the army of pests in rapeseed, whose behaviour, related to population density and migration, can very easily escalate, get out of control and “sweep away” the future crop in no time. The forecast is that this spring the protection of cereal crops and rapeseed will be the limiting factor for achieving high production targets. It is time for this intensive and high-quality plant protection capital to start working at high speed in Bulgarian fields, as it does everywhere in Europe. We are aiming high, we have set out to create modern, competitive and profitable agriculture, but without effective, high-tech plant protection, steered by professionals, this cannot happen!