

Integrated weed control in winter crops with solid stand, spring row crops and winter oilseed rape

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Weed control is a limiting factor in the production of agricultural crops. A statement that, under no circumstances and to this day, has ever been disputed! The question of the day, however, is: is the Bulgarian agricultural producer capable of making the right choice, of structuring his own strategic concept for integrated weed control, in which to invest capital and be confident in the final success?

To answer this question, we must first look at the situational plan in the field. In a few words: strong dynamics! In broad strokes this means the following. The behavioral status of the weed association is constantly changing as a result of an increasingly insecure phytosanitary and climatic environment – the “march” of grass weeds to the north is a good illustration of this finding. In this case, we do not exclude as causes of the “strange behavior” of

weeds the manifestations of resistance, the selectivity of the products, as well as the degree of their persistence. On the other hand, the transboundary transfer of invasive weed species has stable parameters and is constantly increasing. To this picture we must add disrupted crop rotations and imbalances in technological schemes, mainly as a consequence of the drive at all costs to achieve conjunctural (most often short-term) commercial objectives.

The example of chickpea and sunflower confirms this fact. This is the place to mention that there are also considerable deficits in the professional skills of farmers with regard to agronomy and plant protection practices. We should not omit yet another key circumstance – the rampant speculation with counterfeit plant protection products! Illegal trade continues to flourish before the eyes of the state administration – the Ministry of Agriculture and BFSA, the Ministry of Interior and the Border Police.

Against this dynamic, with strongly negative consequences for the health status of agricultural crops and their production, which in any case strives to achieve sustainability and prosperity, there are two very strong, emblematic opportunities for counteraction and reduction of its negative impact.

One of them is the global agrochemical industry, which has representation in Bulgaria. In recent years this industry has made large-scale, revolutionary discoveries. The result is already here: many of the emblematic innovations in the segment are positioned on the Bulgarian pesticide market. The strong competition between individual companies is yet another great advantage for domestic farming.

The second opportunity, which, to our great fortune, has been realized in our country, is the scientific team of the leading Bulgarian herbologist Prof. Tonyo Tonev, part of the academic community of the Agricultural University in Plovdiv.

The journal “Plant Protection” has the privilege to publish this feature topic of the issue, mainly implemented by the young scientific members in herbology – Chief Assistant Professor Dr. Anyo Mitkov, Chief Assistant Professor Dr. Mariyan Yanev and Assistant Professor Dr. Nesho Neshev. All of them are lecturers in the Department of “Agriculture and Herbology” at the Agricultural University in Plovdiv. This young creative team is part of the future of agricultural science in Bulgaria and, by tradition, will remain an inseparable link with agricultural practice.

The team is led by Prof. Tonyo Tonev, who has established a school in the field of weed control. These three young, ambitious and motivated scientists have become an integral part of the large-scale and long-term projects in the history of the Agricultural University in Plovdiv: 20 years of the research and implementation

project “Herbitour”, 10 years of the research and implementation project “Maize – Queen of the Fields” and 5 years of the “Center for Biological Testing of Plant Protection Products” (Herbology Department).

Thanks to the long-standing and fruitful partnership with all major companies in the pesticide business, the team of Prof. Tonev has managed to establish itself as a leader in innovations in the field of weed control – a wide-ranging and highly responsible sector in the area of plant protection.

To the profile of this highly valuable, visionary “team” we must add one more fact. This is trust. Prof. Tonev and his team enjoy unconditional trust both from pesticide traders and from the farmers in the country. The team of Prof. Tonev is an intermediary between business and production. The institutional structure with high scientific and professional capacity, expert competences, genuine loyalty, discretion and objectivity is a key factor in the positioning and implementation of innovative products and technical solutions for the protection of plants from weeds. It generates news, influences market attitudes and expectations, helps to define informed choices and formulate winning plans to counteract dangerous weed competition.

The new type of partnership communication, successfully carried out by Prof. Tonev and the young people from his team, is changing the perspective and the horizon for Bulgarian farmers, changing the level of their awareness!