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- 10-20 / .

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1959-1961 .	11,5	-	11,5	-	-
, 1960-1967 .	28,1	16,6	30,4	18,9	2,3
, 1966-1973 .	32,4	21,4	35,6	24,1	2,7
, 1972-1979 .	33,8	22,3	40,0	28,5	6,2
, 1978-1985 .	38,4	26,9	45,6	34,1	7,2
, 1984-1991 .	44,5	33,0	55,9	35,6	11,4
, 1990-1997 .	38,5	27,0	50,0	32,9	11,5
, 1996-2003 .	44,3	32,8	56,7	44,8	12,4
, 2002-2008 .	43,2	31,7	51,6	40,1	8,4
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16,3 / .

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- 10,8 / .

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2001-2003 . 5,9;  
- 2,28-3,03; S - 11,2-12,2 - /100 ,  
- 1,9-2,1%; 2 5 - 187-194, 2 - 211-299 / .

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- N<sub>120</sub>P<sub>60</sub>K<sub>180</sub>  
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# **COMPLEX APPLICATION OF CHEMICALS IS THE BASELINE FOR HIGH PRODUCTIVITY AND SUSTAINABLE AGRICULTURE**

**Aliiev A.M., Varlamov V.A., Vaulina G.A., Derzhavin L.M., Perevedentseva S.V., Samoilov L.N., Sychev V.G., Shapoval O.A., Yakovleva T.A.**

**Summary.** Crop productivity increased with time from 11.5 dt/ha g.u. in 1959-1966 up to 43.2 dt/ha in 2002-2008 on FYM-mineral background under complex application of herbicides, fungicides and retardants in static field experiment at VNIIA Central Experimental Station. Fertilization and integrated crop protection in another experiment provided yield as high as 77-86 dt/ha for winter wheat in 2002-2008 and 75-77 dt/ha for spring barley (41 dt/ha on PK background). Negative effect of chemicals and pesticides on the environment was not revealed.

**Key words:** fertilizers, pesticides, agrochemicals, crop rotation, crop productivity.