

Occurrence of Infectious Pancreatic Necrosis Virus of Salmonids in Bosnia and Herzegovina

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- Infectious pancreatic necrosis (IPN) is one of the first described and most studied viral fish diseases in the world
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- genus *Aquabirnavirus*, family *Birnaviridae* → non-enveloped dsRNA virus

- Negative economic impacts → direct: high mortality
→ indirect: preventive measures,
disease control - health inspections,
surveillance, diagnostics

- The present study reports the results obtained during the recent six years of surveillance and diagnosis of fish viral diseases at the Department of Aquaculture (NRL for viral fish diseases) of Faculty of Veterinary Medicine, University of Sarajevo

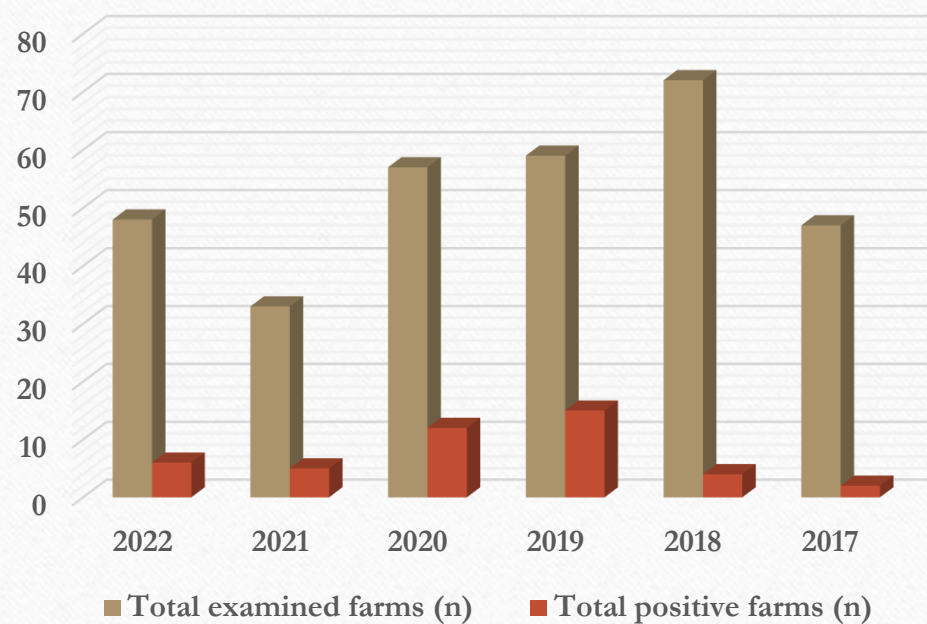
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- virological surveillance through  state monitoring of viral fish diseases
 quarantine upon import
 internal controls of fish farms
 restocking

- diagnostic  VHSV
 IHNV
 IPNV

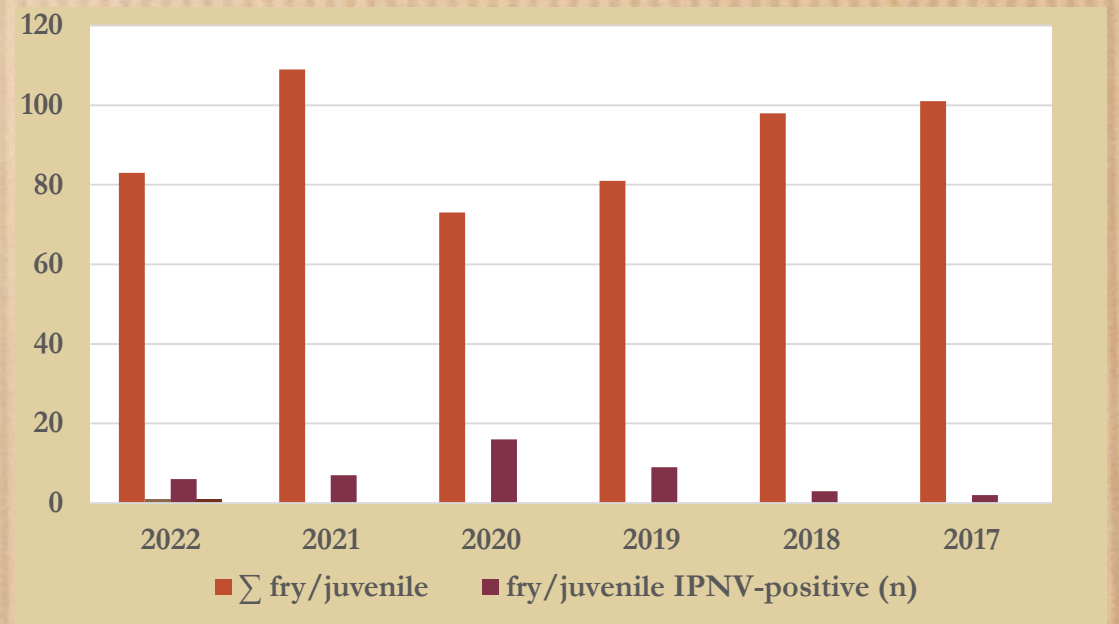
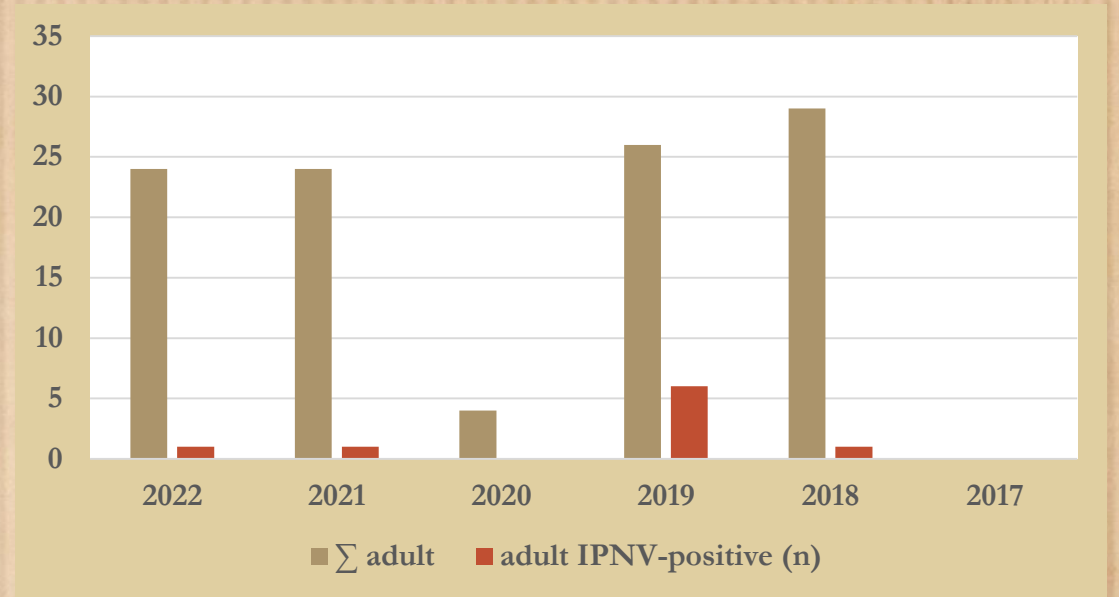


Year	Sample (pool) (n)	IPNV-positive (pool)	%	Total examined farms (n)	Total IPNV-positive farms (n)	%
2022	107	7	6.54	48	6	12.5
2021	133	8	6.02	33	5	15.15
2020	77	16	20.78	57	12	21.05
2019	107	15	14.02	59	15	25.42
2018	127	4	3.15	72	4	5.56
2017	101	2	1.98	47	2	4.26

1 pool = up to 10 individuals



Year	Σ fry/juvenile (pool)	fry/juvenile IPNV-positive (pool) (n)	%	Σ adult (pool)	adult IPNV-positive (pool) (n)	%
2022	83	6	7.23	24	1	4.17
2021	109	7	6.42	24	1	4.17
2020	73	16	21.92	4	0	0.00
2019	81	9	11.11	26	6	23.08
2018	98	3	3.06	29	1	3.45
2017	101	2	1.98	0	0	0.00

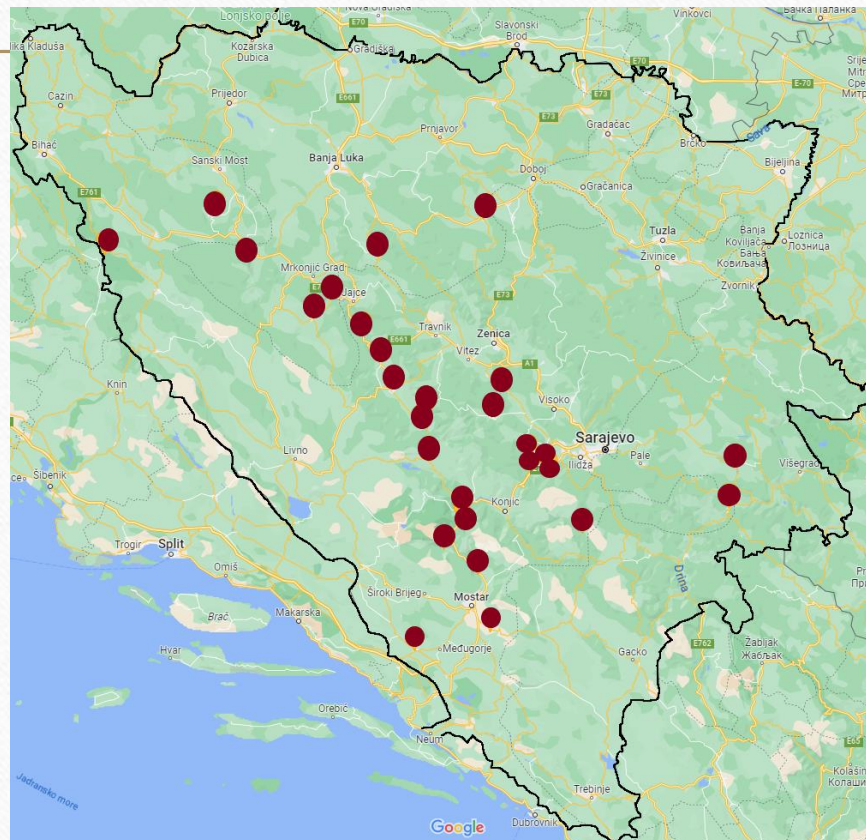




IPNV



- rainbow trout
- brown trout
- brook charr
- arctic charr
- softmouth trout



IPNV



- marble trout
- Danube salmon



no clinical picture of the disease



asymptomatic infection ↔ anamnestic data: no increased mortality

- host genetic variation in resistance to IPN
- virulence may vary between IPNV isolates

Based on our thorough analysis and many years of monitoring viral diseases of salmonid fish species, we have concluded that the infectious pancreatic necrosis virus continuously persists in fish farms in Bosnia and Herzegovina.



Thank
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